Southern California's Computer Magazine

Apr. 18, 1994 • #122

FREE

MicroTimes™

BAM ACCESS TO MARKETS • BAM MEDIA • BAM ACCESS TO MARKETS

Multi Media & beyond

Wrath of the Gods, CD ROM Amiga Style, and more

Reinventing T/Maker

How a small software company found happiness in the content business

T/Maker Founders Heidi Roizen and Royal Farros

"I was amazed how easy it was! And very affordable too."
Tom Veatch
East Palo Alto

Domino®

BUILD YOUR OWN COMPUTER!

Our Consultants will help you learn to build it yourself!

INSTANT UPGRADES, SERVICE, REPAIRS!

COMPONENTS

- **MRi Multimedia Kit.....$348**
  - ***NEW!*** Sony 33A dual-speed CD-ROM
  - MRi Mozart 16 audio card & software
  - Speakers
  - 6CD Titles for Windows: Encyclopedia, The Animals, World Atlas, US Atlas, ChessMaster, Mavis Beacon Teaches Typing
- **Genuine MICROSOFT Serial Mouse ..$39**
- **IBM 6.1 DOS $29**
- **Conner 540MB Hard Drive $395**
- **386SX-40MHz Board w/CPU $68**
- **486 VLB Motherboard.....$99**
  w/256K, Includes 3 VLB slots and P24T socket
- **32-Bit VLB IDE I/O $29**
- **32-Bit Trident 9400 VLB SVGA $89**
  1MB expandable to 2MB

AOC

- Brighter Color
- Sharper Image
- Overscan
- Digital Control

14" SVGA 1024x768 .28mm
$228

Mr. Modem

INTERNAL $120
EXTERNAL $145

14,400 bps Fax/Modem
Fast, Standard, Reliable!
Bitcom & BitFax/OCR for DOS & Windows

- Error Control (MNP2-4, V.42bis)
- Compression (MNP5, V.42)
- Up to 57600 bps Throughput!
- Fully Downward Compatible
- Intelligent Speed Selection
- Data or Fax Mode Auto-Detect
- Auto-Receive/Send
- File-Transfer
- Broadcast Fax
- Connect to On-Line Services
- Custom Cover Pages
- Plain-Paper Printing
- Schedule Faxes For Evenings
- Terminal Emulation
- Custom Phone Book
- OCR Converts Faxes To Formatted Text

5 YEAR GUARANTEE!

WE ALSO BUILD COMPLETE SYSTEMS TO FIT YOUR NEEDS.

APRIL SPECIALS

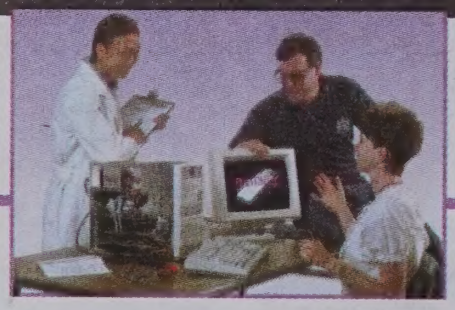
- **IBM SLC-66MHz VLB Board w/CPU** — $315
  - 3-VLB Slots
  - Expandable to 256K
  - Power Meter 25.81
  - Add $15 for IBM DOS 6.1 w/board purchase
- **MRi 486 VLB Motherboard w/4MB** — $448
  - 256K
  - 3 VLB slots
  - Ziff socket
  - 72-pin memory slots
- **MRI Pentium PCI System Base** — $1498
  - Intel Pentium 60MHz CPU
  - MRi PCI board w/512K
  - MRi PCI SVGA Card w/1MB
  - MRi PCI IDE Controller
  - Medium Tower Case w/230 Watt Power Supply
- **MRi Notebook NB-8000 .....$1399**
  System includes: 486SLC, 4MB, 120MB HDD, high-quality backlit 10" display, 64 gray-levels, PCMCIA 2.0 slot, 2 Ni-Cad battery packs, built-in trackball, removable floppy disk drive, full-function keyboard. PCMCIA fax/modem optional

A LARGE VARIETY OF CD SOFTWARE TITLES ARE AVAILABLE IN ALL OF THE DOMINO STORES!!

DOMINO IS EXPANDING!

DOMINO GLENDALE WILL BE OPEN ON APRIL 1, 1994

We are not responsible for typographical errors



Any Domino location honors the warranty on products marked with this label

GENUINE DOMINO PRODUCT

Prices subject to change without notice

SOUTHERN CALIFORNIA SELF SERVICE CENTERS *

TORRANCE
2535-237th St., Ste 102
310/325-9701
OPEN SUNDAY BY APPT.

IRVINE
17145 Von Karman Ave.
Ste 106
714/252-8494

***YORBA LINDA**
3890 Prospect Ave., Ste. C
714/579-0808
OPEN SUNDAY BY APPT.

***GLENDALE**
6900 San Fernando Rd.
818/845-8544

Domino® COMPUTER
Your Neighborhood Workshop
Service and Upgrade Center

SOUTHERN CALIFORNIA SELF SERVICE CENTERS

***CANOGA PARK**
22330 Sherman Way,
Ste. C7
818/340-7490

***CLAREMONT**
975 West Foothill Blvd.
909/482-4600
OPEN SUNDAY BY APPT.

***THOUSAND OAKS**
670 E. Thousand Oaks Blvd.
805/374-8806

PASADENA
2684 E. Colorado Blvd.
818/793-0518
OPEN SUNDAY

AMERICAL'S 90Da$ SALE

vs. SAME As CASH!

ON ALL SYSTEM PURCHASES (OAC)

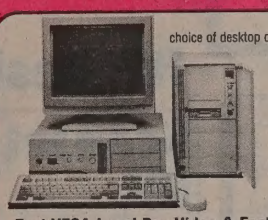
Multi-Media VLB

8 MB RAM
340 MB HD
$1999

2X CD-ROM • 16bit SoundBlaster • 14" SVGA

- 8 MB RAM, 340 MB hard drive, 256K cache
- 1.44MB 3.5" floppy disk drive
- 14" SVGA-NI color monitor, .28mm dotpitch
- Cirrus Logic VLB Windows accelerator, 2 MB, 1280x1024, 16 million colors*superfast!*
- Panasonic 3401 CD-ROM, 16bit SoundBlaster sound card, Labtec speakers, 3 CD titles
- 101 keyboard, hi-res mouse, 2S-1P-1G ports

486SX-33 VLB



choice of desktop or mini-tower

4 MB RAM
250 MB HD
$1359

Fast VESA Local Bus Video & Fast VLB HD Controller!

- 4 MB RAM, 250 MB hard drive, 128K cache
- 1.44MB 3.5" floppy drive • 2400/9600 internal fax-modem
- 14" SVGA-NI color monitor, .28mm dotpitch
- Cirrus Logic VLB Windows accelerator, 1 MB, 1024x768, 16 million colors—*superfast!*
- 101 keyboard, hi-res mouse, 2S-1P-1G ports

486DX2-66 VLB

choice of desktop or mini-tower

4 MB RAM
250 MB HD
$1649

Fast VLB Video & HD Controller • Larger 15" Display

- 4 MB RAM, 250 MB hard drive, 128K cache
- 1.44MB 3.5" floppy disk drive
- 15" SVGA-NI color monitor, .28mm dotpitch
- Cirrus Logic VLB Windows accelerator, 1 MB, 1024x768, 16 million colors—superfast!
- 101 keyboard, hi-res mouse, 2S-1P-1G ports

486DX2-66 Power VLB

choice of desktop or mini-tower

8 MB RAM
420 MB HD
$2099

Fast VESA Local Bus & 15" Flatscreen with 2MB Video!

- 8 MB RAM, 420 MB hard drive, 256K cache
- 1.44MB 3.5" floppy disk drive
- 15" flatscreen color monitor, .28mm dotpitch
- Cirrus Logic VLB Windows accelerator, 2MB, 1280x1024, 16 million colors—superfast!
- 101 keyboard, hi-res mouse, 2S-1P-1G ports

1.44MB Formatted Disks

44¢ ea. in 50 Paks

Backup Tapes

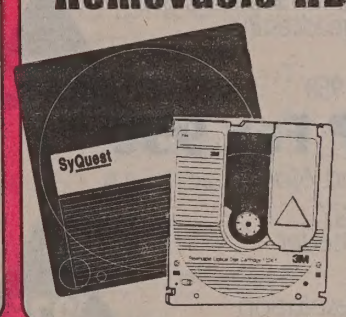
DC 2120
QIC 80 FORMATTED
(EXP. 3/31/94)

$17.99

DC2120	$ 15.99
DC6150	$ 19.90
MAGNUS 2.0	$ 39.99
DAT 4mm 90	$ 14.99
8mm 112	$ 13.99
8mm 120	$ 18.99

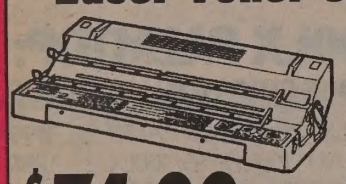
Removable HDs

SYQ. 44MB
$65.99 EA. QTY 5



SyQuest 44	$ 69.99
SyQuest 88	$ 104.99
SyQuest 105	$ 59.99
Optical 512	$ 94.99
Optical 1024	$ 94.99
Optical 1.3Gb	$ 149.99
Bernoulli (3pk).	$ 219.99

Laser Toner Cartridges

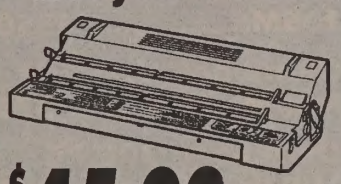


Epson-IBM-Okidata Carts Available (call for $$$)

$74.99 92295A HP-III

92275A	$ 79.99
92285A	$ 85.99
92298A	$ 99.99
92291A	$ 109.99
92274A	$ 69.95

Recycled Toner Cartridges

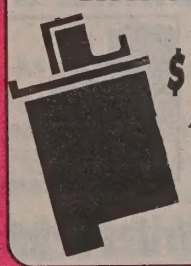


$5 Credit for Empty Cartridges!

$45.99 92295A HP-III

92275A	$ 45.99
92285A	$ 45.99
92298A	$ 79.99
92291A	$ 79.99
IBM 4019	$ 119.99

INK JET CARTRIDGES



$25.99
51626A
HI-CAPACITY

INK-JET CARTS

51608A	$ 17.59
51525A	$ 27.99
51606A	$ 25.99
51606C	$ 27.99

BUBBLE-JET INKS

BC01	$ 22.99
BJ-642	$ 21.99

Refills Available!

Advanced Multi-Media Kit

Triple-speed NEC SCSI-2 CD-ROM, 195ms access, 450KB/sec DTR
ProAudio Spectrum 16bit Sound Card
2 Stereo Powered Spkrs

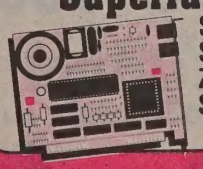
$599.99

Double-Speed Multi-Media Kit

Double-speed CD-ROM, 265ms access, 300KB/sec DTR
16bit SoundBlaster Pro Sound Card
2 Stereo Powered Spkrs

$299.99

Superfast Fax Modems



Supra Ext 14.4	$199.99
Supra Int. 14.4	$159.99
Zoom Int. 96/24	$89.99
Supra-Smart-Link Ext. 14.4	$199.99

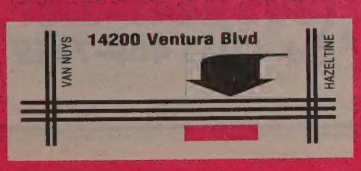
Tape Backup 250 Int. $159.99

Parallel Tape Backup Trakker External $339.99

Keyboards, Mouse & Trackballs

Mice		Keyboards	
Serial Mouse	$ 12.99	101 Compatible	$ 29.99
Trackball	$ 35.99	Focus 2001	$ 44.99
MS Mouse	$ 57.99	101 Kbd w/trackball	$ 59.99

VISA MasterCard DISCOVER AMERICAN EXPRESS Card



— HOURS —
MON–FRI 10AM-5PM
SAT 10AM-5PM
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

AMERICAL GROUP
14200 Ventura Blvd • Sherman Oaks
Tel 818-906-1132 • Fax 818-906-1488

NAMES YOU CAN COUNT ON

HEWLETT PACKARD PRINTERS

HEWLETT PACKARD

daytech

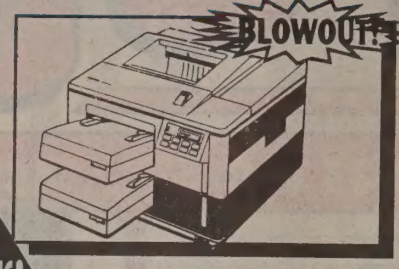
HP LaserJet 4M

FREE TONER OFFER UNTIL APRIL 15

45 Scalable Fonts PCL-5
600 dpi Resolution
8ppm, 2 trays
Apple & IBM Connection
6MB RAM
*DOC ID# 1321
PS Level 2 $1785

HP LaserJet 4si

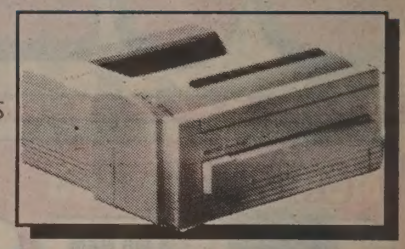
BLOWOUT!



17ppm
2 Paper Trays, 500 ea.
600dpi
2MB RAM
*DOC ID# 1322

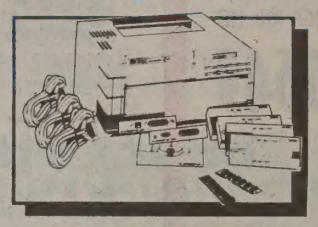
IN STOCK!

HP LaserJet 4L/4ML



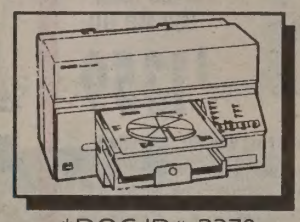
600 DPI
4 PPM
2 MB RAM
Scalable Fonts
Call

HP LaserJet 4P/4MP



Scalable Fonts
600dpi Resolution
4ppm
Stnd. 250 Sheet Tray
Flat Paper Path
2MB RAM
Network Upgradable
*DOC ID# 1328/1329 Call

HP DeskJet 1200 C



600x300 dpi Resolution
6ppm Black/1-2ppm Color *DOC ID# 2370
1MB RAM
Millions of Colors Available
"If you need a color printer, you must see this!"

$1475

Postscript Version Available

HP Desktop Scanners

ScanJet IIP

Black/White
256 Gray Levels
IBM/MAC Int.
*DOC ID# 330
$499

Free WordScan OCR w/Purchase

Scanjet IICX

1600 DPI Resolution
IBM/MAC/PS-2 Int.
Transparency Adapter Opt.
$940

HP Fax 900

Plain Paper Fax Letter, Legal, A4
Inkjet Technology, 300dpi Resolution
100 Page Paper Tray, 30 Page Doc Feeder
50# Memory for Broadcasting
*DOC ID# 2811
CALL FOR HP FAX 950

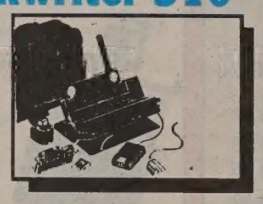
$775

HP Fax 950

Plain Paper Stand Alone Fax
InkJet Technology
30 Page DOC Feeder
300DPI
Send/Receive Resolution
DOC ID# 9642

$975

HP Deskjet/Deskwriter 310



300dpi Resolution
Black & White or Color Output
Portable Printer
IBM/MAC Compatible
*DOC ID# 9637/9634

HP DeskJet/DeskWriter Printers

FREE CONNECTING CABLE WITH PURCHASE!

520

2ppm
Scalable Fonts
*DOC ID# 2308

$299

550C

B/W & Color
2ppm
*DOC ID# 2378
600x300 DPI

$459

560C

B/W & Color
2 Cartridge Slots
Scalable Fonts
*DOC ID# 2382

$595

HP OMNIBOOK SUPER PORTABLE PC

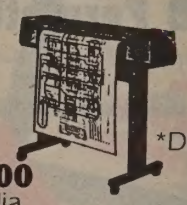
*F1032A	Omnibook 300PC 40MB	$1090
*F1035A	Omnibook 430PC 40MB	$1150
*F1037A	Omnibook 430PC 105MB	$1350
*F1040A	Omnibook Upgrade Fax/Modem	$375
*F1041A	Omnibook 300 PC 2MB Ram Upgrade	$175
*F1044A	Omnibook AC/DC Adapter	$90
*F1045A	Omnibook Rechargeable Bat Pack	$90

PROUD SUPORTER OF KCRW 89.9FM

HP PLOTTERS

CALL FOR DEMO

HP DraftPro Plus Series
A-D size Media
1MB Buffer
Single Sheet Feed
A-E size Media
1MB Buffer
8 Pen Selection
*DOC ID# 5309



HP DesignJet 600
A-D or A-E Size Media
600 dpi Resolution
E Size Complex Plot in less than 6 minutes *DOC ID# 5308

HP DesignJet 650C
Monochrome/Color Plotter,
600 dpi A-D or A-E Size Media
Postscript & Mac Interface Optional *DOC ID# 5311

HP 95/100LX PALMTOP:

HP P/N	DESCRIPTION	SALE
F1000A	HP 95LX Palmtop 512K RAM	$399
F1003A	512K RAM Upgrade 95/100LX	$250
F1005A	Dictionary/Thesaurus 95/100LX	$120
F1011A	AC/DC Adapter	$35
F1012A	5MB Flash Disc Card	$365
F1013A	10MB Flash DiscCard	$580
F1014A	20MB Flash DiscCard	$945
F1020A	HP 100 LX Palmtop 1MB RAM	$519
F1021A	100LX Connectivity Pack	$99
F1022A	HP 100LX Palmtop 2MB RAM	$699
F1027A	Accessory Cradle	$69

DIRECT DROPSHIP WITH ANY PREPAYMENT
Call for Educational Discount!

*FAX BACK FEATURE: FOR INFOR ON ALL PRODUCTS CALL 1-800-333-1917 & ENTER CORRESPONDING DOC. ID#

We ship Federal Express or DHL

daytech

COMPUTER CENTER

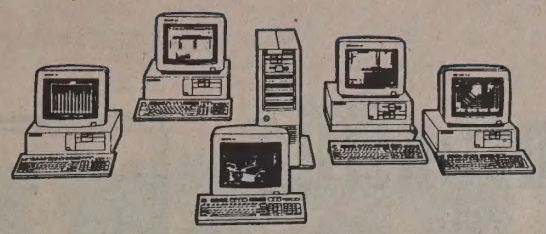
6314 Hollywood Blvd. (at Vine), Los Angeles, CA 90028
Free Parking in rear with validation. Prices subject to change without notice.

(213) 463-3001
(800) 447-3331
Fax (213) 469-7255

HEWLETT PACKARD
Authorized Dealer

HEWLETT PACKARD
Authorized Dealer

Hewlett Packard Vectra PC's



HP Vectra VL2 D3121A
486SX25 Processor
4MB RAM, 106MB HD
Enhanced Local Bus Video
3 1/2in. floppy
MS DOS 6.2, Windows 3.11, Mouse
$899

HP Vectra VL2 D3123A
486/33se
4MB RAM, 170MB HD
Enhanced Local Bus Video
3 1/2in. floppy
MS DOS 6.2, Windows 3.11, Mouse
$1075

HP Vectra VL2 D3133A
486/50
4MB RAM, 210MB HD
Enhanced Local Bus Video
3 1/2in. floppy
MS DOS 6.2, Windows 3.11, Mouse
$1370

Toshiba
T1910CS
486SX/33
1.44MB Floppy, 4MB RAM
Passive Color
$2050 120MB HD
$2275 200MB HD

T1950CT
486DX2/40
1.44MB FL, 4MB RAM
DOS/WIN, Ballpoint Mouse
Active Color
$2750 120MB
$2990 200MB
$3290 320MB

MHZ/PCMCIA FAX MODEM AVAILABLE CALL TARGUS/TOSHIBA
CARRYING CASE CALL TOSHIBA/COMPATIBLE MEMORY UPGRADES

CD ROM
Toshiba 3401
- Double Speed, SCSI Int. **$449**

SCSI Interface Card for Toshiba **$129**
- NEC CDR 600 ..... **$599**

Triple Speed, 450 KB Transfer Rate, SCSI
SCSI Interface card for NEC **$99**

HP Vectra VL2 D3138A
486DX2/66
8MB RAM, 340MB HD
Enhanced Local Bus Video
3 1/2 in. floppy
MS DOS 6.2, Windows 3.11, Mouse
$1970

HP Vectra 486/33N D2872B
486/33 Processor
4MB RAM, 170 MB HD IDE
1.44MB floppy
MS DOS 6.2, Windows 3.11, Mouse
$1460

WE PAY TOP $$$ FOR YOUR USED, TIRED & WORKING HP LASERJETS. (ALL MODELS)

HP Vectra 486M D2893A
486DX/66
8MB RAM, 450 MB HD IDE
3 1/2in. floppy
MS DOS 6.2, Windows 3.11, Mouse
$2450

HP Vectra 486/66M D2892A
486/66M Processor
240MB HD
1.44MB Floppy
DOS, Windows 3.11, Mouse
$2150

HP JET DIRECT NETWORKING CARDS
J2371A	Ethernet/802.3 RJ-45 for 10Base-T	$399
J2372A	Ethernet/802.3 BNC for 10Base2 Thin coaxial cable, RJ-45 for10Base-T	$440
C2071B	Ethernet/802.3 RJ-45 for 10Base-T	$390
C2071D	802.3 RJ-45 for 10Base-T	$390
J2405A	PC LAN TP Adapter	$99
J2406A	6 Pack PC LAN TP Adapter	$89/pcs
NE2000	Compatible PC LAN TP Adapter	$59

Info: Multimedia Kits, Laserjet Upgrades, All PC All PC Upgrades, Custom Configurations & Installation, Novell Installation Experts

HARD DRIVES
207030	213MB, IDE, 3.5", 14ms	$250
207064	250MB, IDE, 3.5", 14ms	$290
207070	343MB, IDE, 3.5", 13ms	$320
207080	545MB, IDE, 3.5", 12ms	$470

MONITORS
Samtron
14" SVGA, .28	$279
15" SVGA, .28	$459
17" SVGA, .28	$750

All International Orders Are Accepted
We ship Federal Express or DHL

COMPUTER CENTER
6314 Hollywood Blvd. (at Vine), Los Angeles, CA 90028
Free Parking in rear with validation. Prices subject to change without notice.

(213) 463-3001
(800) 447-3331
Fax (213) 469-7255

IBM NEC
OKIDATA®
SONY.
Authorized Dealer

APR. 18, 1994 ISSUE #122

MICROTIMES

Editorial (510) 934-3700

Advertising (213) 851-8600 (714) 939-2809

TABLE OF CONTENTS

A NOTE FROM THE EDITORS

We live in interesting times, which are reflected in various ways this issue.

Our cover story is a return to T/Maker (last profiled in 1988), a small, independent company in Mountain View that's successfully reinventing itself in an industry climate completely different from the one in which it was a startup.

At the fourth Computers, Freedom & Privacy conference in Chicago last month, the spotlight was on the growing conflict between the rights of individuals and the role of government in the digital age. A luckless White House representative and a lawyer for the NSA tried to convince a varied and skeptical crowd that government control of cryptography was somehow a Good Thing; meanwhile, in their search for fugitive criminals Kevin Mitnick and wooden-legged "Agent Steal," the FBI erroneously arrested one unfortunate attendee whose name happened to resemble one of Mitnick's aliases and interrogated two others, including ex-Marine and CIA veteran Robert David Steele of Open Sources. Science fiction writer and *Hacker Crackdown* author Bruce Sterling delivered the closing address, which is reprinted in this issue.

And finally, as *MicroTimes* prepares for its tenth anniversary next month, our parent company, BAM Publications, has changed its name, about which we've got more to say on page 12.

The adventure continues...

—ME

Micro Marketplace
A Special Advertising Section For Southern California Computer Buyers
Starts on Page 70

COVER STORY

Reinventing T/Maker

By Mary Eisenhart.....82

Photos: Susana Millman

CEO Heidi Roizen and Chairman Royal Farros explain why they sold off a perfectly fine word processor and bet the company on a new strategy.

NEWS & VIEWS

Becoming BAM Media 12
T/Maker's not the only one involved in self-reinventing. We're doing something of the sort also.

Industry Insight *By Paul Hoffman* 16
AMD Wins Right To Use Intel Code.....16
Apple Ships Power Macs 16
Mega-Mergers: What They Mean For Users ..18
MicroTimes Stock Index.....21

Realizable Fantasies *By Jim Warren* 24
Computer-assisted political clout.

Rumors Of War *By Bruce Sterling* 31
Closing remarks from this year's CFP conference.

Dvorak's Last Column *By John C. Dvorak*.....198
More weirdness from the mailbag.

BUSINESS SOLUTIONS

Pens & Palmtops *By Mitsu Hadeishi* 38
Casio's latest B.O.S.S., the SF-M10.

Laptops *By Ed Kahn* 42
BitFax Professional; the AcerNote 735.

Telecommuting *By Robert Moskowitz* 47
Selecting and training prospective telecommuters.

LANs *By Peter John Harrison* 53
LAN packages for small business.

UNIX *By Bennett Falk*.....59
A short history of approaches to money-making with UNIX.

Accounting *By David A. Simon, CPA, and Jennifer Robin Cherniss*.....64
Tax traps for the unwary.

FEATURE

Learning To Read *By Peter John Harrison* 80
Brøderbund's Living Books.

Multimedia and Beyond

Multimedia 101 *By Jonathan E.* 167
The state of the art, the wrath of the gods.

Amiga *By Douglas J. Nakakihara* 176
CD-ROMs, the Amiga way.

New Sounds From The Mac AV
By Tony Reveaux.....184
Dealing with computer acoustics.

PRODUCT SPOTLIGHT

Product Updates.....105

New Products

PC Software
Memorize•It.....105
Xerox TextBridge 2.0.....105

Books
The Internet Connection.....106
SimCity 2000: Power, Politics, and Planning...106

PC Hardware
Micro Computer Twinface.....106
Alaris EnergySmartPC 106

Product Reviews

Games
Shadow Caster.....110
Heirs To The Throne.....114

Software Utilities
Adobe Acrobat 114

Macintosh Software
Kai's Power Tools 2.0 118

CD-ROMs
TurboTax Deluxe.....138
Quicken For Windows.....138
Mayo Clinic Family Health Book.....138

RESOURCES

Calendar Of Events 144
Yamaha Synthesizer Clinic.....144
AFI Open House And Media Career Day...144
Computer Show—Buena Park 144
User Group Network.....152
This month's BBS column—The Nocturnal Sanctuary.
Classifieds 188
Index Of Advertisers By City.....194
Index Of Advertisers 196

Creative Computers announces:

The Power PC™ is HERE!

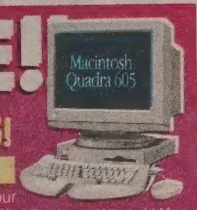
Creative Computers

Southern California's #1 APPLE MACINTOSH DEALER!

FREE! Apple® Macintosh Quadra® 605!

4MB/80 HD

Come into any of the four locations listed (left), before May 31, and enter to win a NEW Apple Macintosh Quadra 605 worth almost $1000!

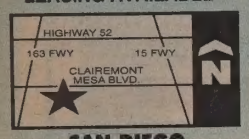


Drawing will be held May 31, 1994. No purchase necessary to enter. Monitor and keyboard not included.

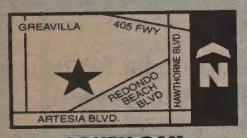
YOU CAN WIN TOO!

POWERBOOK WINNER! Congratulations to RINO PASSANITI of Sun Valley!

90 DAYS SAME AS CASH!
FINANCING AVAILABLE
LEASING AVAILABLE

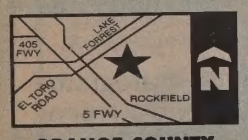


SAN DIEGO
8841 Clairemont Mesa Blvd.
Kearny Mesa
619-467-4700



SOUTH BAY
4453 Redondo Beach Blvd.
Lawndale
310-542-2292

SANTA MONICA
1505 Wilshire Blvd.
310-394-7779



ORANGE COUNTY
23710 El Toro Rd. Ste. F-1
Lake Forest/El Toro
714-859-3300

STORE HOURS:
Los Angeles & Orange County:
10-7pm MON-SAT,
11-6pm SUN
San Diego:
9-7pm MON-FRI,
10-7pm SAT • 11-6pm SUN

Apple, the Apple logo, LaserWriter, StyleWriter, Macintosh PowerBook, Macintosh Quadra, Mac, & Macintosh are registered trademarks of Apple Computer, Inc. PostScript is a trademark of Adobe Systems Inc. Classic is a trademark licensed to Apple Computer, Inc., PowerBook Duo, AppleCD, Newton, "MessagePad, Power Macintosh, System 7 are trademarks of Apple Computer, Inc. Trinitron is a trademark of Sony. NuBus is a trademark of Texas Instruments. Prices and specifications subject to change without notice. Limited to stock on hand.

Call for current pricing and availability.

Authorized Reseller

Apple Power Macintosh™ 6100/60

- PowerPC 601 RISC processor; integrated math coprocessor
- Apple's most affordable Power Macintosh for your everyday home, education, business and computing needs
- Runs your current Macintosh applications (DOS and Windows need SoftWindows)
- Offers a fast, 60 MH-z microprocessor and an expansion slot for adding extra capabilities.

8MB/160HD Part# 64123 **$1589**

8MB/160HD Part# 64123 **$1489***

*With purchase of advertised Magnavox 14" monitor or Proton 15" monitor or Apple 16" Color Display.

Apple Power Macintosh™ 7100/66

- PowerPC 601 RISC processor; integrated math coprocessor
- Ideal for users who want a powerful, expandable computer for word processing, spreadsheet and data base work
- Runs your current Macintosh applications (DOS and Windows need SoftWindows)
- Offers expandable memory and storage capability, three NuBus slots, a fast, 66 MH-z microprocessor and 24-bit color support.

8MB/250HD Part# 64125 **$2539**

8MB/250HD Part# 64125 **$2439***

*With purchase of advertised Magnavox 14" monitor or Proton 15" monitor or Apple 16" Color Display.

Apple Power Macintosh™ 8100/80

- PowerPC 601 RISC processor; integrated math coprocessor and 256K memory cache
- Apple's fastest, most expandable system—includes an 80 MH-z PowerPC microprocessor
- Plenty of storage capacity (Internal 250MB, 500MB, or 1 GB hard disk drive) and expansion slots (three 7-inch NuBus expansion cards; dual-channel high-performance SCSI that supports up to seven SCSI devices). It also runs your current Macintosh applications (DOS and Windows need SoftWindows)

8MB/160HD Part# 64123 **$1589**

8MB/160HD Part# 64123 **$1489***

*With purchase of advertised Magnavox 14" monitor or Proton 15" monitor or Apple 16" Color Display.

• APPLE SPECIAL BUYS • APPLE SPECIAL BUYS •

A SPECIAL PURCHASE FROM APPLE LETS US PASS BIG SAVINGS ON TO YOU!
ALL APPLE SPECIAL BUYS ARE BRAND-NEW IN BOX WITH A FULL ONE-YEAR WARRANTY

Apple® Macintosh Centris™ 650

Brand New in a Box
One Year Warranty

- The Centris 650 is equipped to handle anything from sophisticated spreadsheets to graphics-intensive publishing
- 25-MHz 68040 microprocessor

* Apple Basic Color Monitor — Keyboard not included. — part# 61089

8MB/230HD /CD & FREE MONITOR* **$1899**

Why is the Centris 650 better than the Quadra 610?

The Centris 650 features:
- 68LC040 processor, 25 MHz
- 3 NuBus expansion slots
- Upgradable to more powerful PowerPC
- Expandable to 136MB RAM

The Quadra 610 features:
- 68LC040 processor, 25 MHz
- 1 expansion slot
- Upgradable to less powerful PowerPC
- Expandable to 68MB RAM

A Lot More Capability, LESS MONEY!

Apple® Macintosh Quadra™ 660AV

Apple Special Buy!

Brand New in a Box
One Year Warranty

Part # 62690

- 25 MHz 68040 with integrated math processor
- 55 MHz DSP • On board Ethernet

8MB 80HD **$1299**

Apple® Basic Color Monitor

Apple Special Buy!

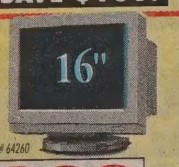
- 640x480 pixels
- .39 dot pitch
- 14" (diagonal) screen
- Tilt and swivel base
- Limited supply!

Brand New in a Box. Part # 63976 — **$179**

compared to the Apple Color Plus... — One Year Warranty Part # 62597 — **$299** YOU SAVE $100!

- 640x480 pixels
- .28 dot pitch
- 14" (diagonal) screen

Apple® 16" Color Display



- 70% more work area than standard monitors
- Tilt and swivel base

Part # 64260

$899 w/purchase of CPU — **$989** purchased separately

Apple Macintosh PowerBook® 165c

- 33-MHz 68030 microprocessor with math coprocessor • Built-in color display (256 colors) • Built-in support for Apple Color Displays • Integrated microphone

4MB 80HD **$1699** — part# 61092

NEW PRODUCTS

DOS Compatibility Card for Macintosh

Part # 63914

For Macintosh Centris 610 and Macintosh Quadra 610

$389

The fast, affordable way to use DOS and windows applications on your Macintosh!
- Includes Intel486™ SX/25 microprocessor and MS-DOS 6.2
- Customer Installable

Power Macintosh Upgrade Card

Requires at least 8MB of RAM.

Upgrade your Quadra/Centris 610, 650 or Quadra 700, 800, 900, 950 to PowerPC!

- Includes sytem software version 7.1.2
- Customer Installable

$739 Part # 64186

SPECIALS

VST Thin Pack

High density, maintenance free bateries for the Power Book 100 through 180c. UL Listed for safety, comes bundled with VSTThin PacK Utilities battery management software. Part # 62423

$189.99

Microsoft OFFICE

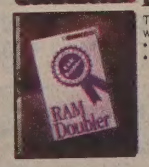
Part # 60968

Includes:
- Microsoft Word 5.1
- Microsoft PowerPoint 3.0
- Microsoft Excel 4.0 &
- Microsoft Mail

plus FREE TrueType Master Set Worth over $70

$479

RAM Doubler



The simplest and most affordable way to add memory to your Mac!
- Doubles your RAM
- Compatible with ALL applications

Part # 63748

$62.99

• MONITORS • MONITORS • MONITORS • MONITORS • MONITORS •

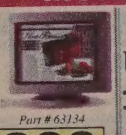
PROTON 15" Multimedia Monitor

Part # 64195

- PowerPC compatible
- Stereo speakers built-in
- Up to 1024x768 resolution
- Digital controls
- 16" resolution on a 15" monitor
- Pin-Cushion-Control provides you with adjustability, eliminating geometric distortion.

599

Apple Multiple Scan 20" Display



Part # 63134

- 640x480 resolution
- Super fine 0.29 mm dot pitch design
- 75 Hz Flicker-free Refresh Rate
- Features a low curvature design that minimizes distortion and reflections
- Sony Trinitron true colors screen

1999

UMAX UC630 LE

Part # 62568

- 600 dpi color scanner
- Supports materials up to 8.5"x14" • Rated 4.5 mice by MacUser • Includes Adobe PhotoShop 2.5 LE & Apple's Photoflash

799

HEWLETT PACKARD ScanJet IIcx

Part # 62885

- Superior image quality with 1600-dpi enhanced resolution; 400-dpi optical resolution
- High performance color/grayscale scanner at a breakthrough price!

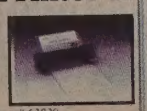
999

PRINTERS • PRINTERS • PRINTERS • PRINTERS • PRINTERS

CITIZEN™ NoteBook Printer II

- 360 dpi resolution
- thermal fusion print engine
- portable printer perfect for PowerBooks
- Color printing capability

839

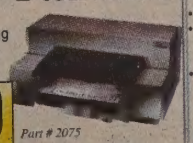


Part # 63839

HEWLETT PACKARD DeskWriter

- Inkjet printer
- Grayscale printing
- 35 scalable fonts
- Media flexibility

$249

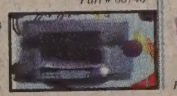


Part # 2075

HEWLETT PACKARD DeskWriter 550

- 300x300 dpi resolution
- Easy color printing • Convenient black & color printing without switching cartridges
- 35 TrueType scalable fonts

499



Part # 60746

Apple Color Stylewriter®

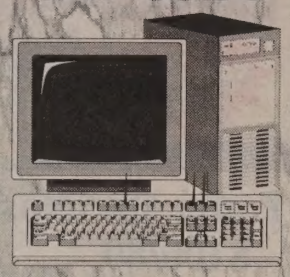
- Thermal ink jet
- 360 dpi in normal mode
- 64 TrueType fonts
- Excellent print quality and superior color matching

Part # 64136

$625 LIMITED SUPPLY!

R-TECH

Computer Center
22129 Sherman Way
(818) 34R-TECH
347-8324



Media Vision
Fusion Double CD-16
$299.00 FREE INSTALLATION
Pro Audio Studio 16, 20 Voice!
2X NEC Int. XA CD-ROM
Amplified Stereo Speaker System!
Compton's Interactive Encyclopedia for Windows, Battle Chess Enhanced, 7th Guest, and more!
With this ad. While supplies last.

Sound Blaster
DISCOVERY CD 16
$299.00 FREE INSTALLATION
Sound Blaster 16, True 16 Bit!
2X Int. CD-ROM, 320ms Access!
Stereo Speakers & Free CDs!
San Diego Zoo - The Animals, Software Toolworks Multimedia Encyclopedia, and more!
With this ad. While supplies last.

Sound Blaster
EDUTAINMENT CD 16
$399.00 FREE INSTALLATION
Sound Blaster 16, True 16 Bit!
2X Int. CD-ROM, 320ms Access!
Stereo Speakers & Free CDs!
Software Toolworks Multimedia Encyclopedia, Loom, Sherlock Holmes - Consulting Detective, and more!
With this ad. While supplies last.

Media Vision
Double Fusion LX
$279.00 FREE INSTALLATION
Pro Audio Spectrum 16, Stereo!
2X Int. XA CD-ROM
Shielded Amplified Speakers
Compton's Interactive Encyclopedia Plus More!
With this ad. While supplies last.

CD-ROM DRIVES

MV Fusion Double CD	$299
CL Edutainment 16 Bundle	$399
CL Discovery 16 Bundle	$299
Mitsumi Double Speed	$179
Toshiba 3401 Twin Speed	$325
NEC 4X Pro Ext	$925
NEC 3XI OEM	$369

FAX MODEMS

Best Data 24/96 Int	$49
Best Data 14.4/14.4 Int	$119
Pract. Perif. PM14400MT	$169
Pract. Perif. PM14400FX Int.	$155
Intel Fax/Modem 14.4 Int.	$159
Intel Fax/Modem 14.4 Ext.	$179
Supra Fax/Modem 144IFE	$139
U.S. Robotics 14.4 Int	$129
U.S. Robotics 14.4 Ext	$179

LAPTOPS

Texas Instruments	$CALL
AST Powerexec	$CALL
NEC Ultralite	$CALL
Toshiba Satellite	$CALL
Pocket Ethernet	$159
Colorado Trakker	$339
3COM PCMCIA Ethernet	$298
Megahertz PCMCIA 14.4 XJ	$325
PCMCIA CARDS	$CALL
Memory Upgrades	$CALL

WE CARRY IT ALL!

U.S. ROBOTICS
14.4 Fax/Modem w/Quicklink II Fax for Dos & Windows
ONLY $119.00

MICE

Logitech Mouseman	$49
Logitech Dexxa Mouse	$25
Logitech Trackman	$79
MS Ballpoint PS2 Connector	$79
MS Serial Mouse	$45
Microspeed Wintrac	$79
Microspeed PC-Trac	$69

MONITORS

CTX 1451GM 1024x768 NI	$299
CTX 1561LR 1024x768 NI	$369
CTX 1760LR 1280x1024	$649
NEC 5FGP 1280x1024	$1149
Viewsonic 15E 1024x768	$369
Viewsonic 15 1280x1024	$459
Viewsonic 17G 1280x1024	$825
Viewsonic 17 1600x1280	$969
14" .28 NI 1024x768	$249

PRINTERS

Okidata OL410E	$659
Okidata OL400E	$509
HP Laserjet 4	$1375
HP Deskjet 520	$299
HP Deskjet 560C	$569

SOUND CARDS

MV Pro Audio Spectrum 16	$99
MV Pro Audio Spectrum Basic	$85
CL SB Deluxe 8 Bit	$59
CL SB 16 Basic	$115
CL SB Pro Deluxe	$85

VIDEO CARDS

ATI Graphics Ultra 2MB VLB	$329
Cirrus Logic VLB 1MB	$99
Diamond Stealth VLB 1MB	$169
Diamond Viper VLB 2MB	$369
Trident 1MB ISA	$79
Trident 1MB VLB	$89

NETWORKING

3Com 3C509-Combo	$138
NE 2000 Compatible	$59
Intel Etherexpresss 16	$109
Lantastic	$CALL
Novell	$CALL

MISC.

1.05 Gig SCSI HD 9MS	$749
540MB IDE HD	$399
420MB IDE HD	$299
Teac 1.2 & 1.44 Set Only	$95
Video Spigot	$265
CL Video Blaster	$329
Computer Eyes LPT	$259
Colorado DJ-20	$179
Conner Tapestor	$159
Formatted DC2120	$16
Keyboards From	$25

and much much more...

90 DAY SAME AS CASH FINANCING AVAILABLE
Store Hours 10-6 M-F & 10-3 Sat
All brand names are trademarks of their respective companies. Prices quoted based on 3% cash discount. Prices and specifications subject to change without notice. RTC is not responsible for typographical or photographical errors. Financing subject to credit approval.

COMPUTER CHECKS **COMPUTER EXCHANGE** COMPUTER FORMS

NEW • USED • REBUILT - WE'LL SELL IT • BUY IT • FIX IT!

NEW SYSTEMS
BARE BONES SYSTEMS

486SLC/33MHz	$315
486SLC/66MHz	$450
486DX/33MHz	$600
486DX/50MHz	$775

MONITORS

14" Mono Monitor	$95
14" SVGA Color Mon. (.39)	$185
14" SVGA Color Mon. (.28)	$240

USED SYSTEMS
LIMITED QUANTITY!

286 640K, 20MB Hard Drive	$250
386SX/40MHz, 40MB Hard Drive	$300
486DX/50MHz, 40MB Hard Drive	$700

HARD DRIVES (NEW AND USED)

20MB MFM (used)	$50
40MB MFM (used)	$75
220MB IDE (New)	$220

(714) 841-3393 COMPUTER INVOICES
17931 Beach Blvd., Suite 110
Huntington Beach, CA 92647

MICROTIMES

CONTRIBUTORS

Lenny Bailes teaches, writes, and consults about computer-related subjects and lives in San Francisco.

Jennifer Robin Cherniss is a writer based in the East Bay.

John C. Dvorak is a prolific author and gets a lot of strange mail.

Jonathan E. writes about multimedia for us and world music for our sibling publication *BAM.*

Bennett Falk works in technical support at Sybase and is the author of the recently published book *The Internet Roadmap.*

Mitsu Hadeishi is the owner of Open Mind Systems in Ashland, Oregon.

Peter John Harrison is a San Mateo-based data communications and connectivity specialist. He can be reached as *peterh@well.sf.ca.us*

Fred Haslam is an independent programmer based in the Bay Area. His most recent project was coauthoring SimCity 2000.

Paul Hoffman is an independent consultant who's been writing about computers for over fifteen years.

Ed Kahn is a writer and consultant based in Studio City.

Matthew Leeds is a networking czar at Brøderbund.

Robert Moskowitz is a consultant based in Woodland Hills.

Douglas J. Nakakihara is a CPA by trade and an Amiga enthusiast by inclination.

Tony Reveaux, a San Francisco-based consultant, is a columnist for *Film/Tape World.*

David A. Simon, CPA, is in tax and accounting practice in Oakland.

Jim Warren serves on Autodesk's board of directors and spends a lot of time dealing with political issues.

John Wolcott is a free-lance writer based in Huntington Beach.

MUSIC & MULTIMEDIA

KORG X3+4

SYNTHESIZER, CARRYING CASE, KEYBOARD STAND
6 DISK SOUND LIBRARY & HEADPHONES!

FREE
CARRYING CASE
KEYBOARD STAND
SOUND LIBRARY
& HEADPHONES!

Incorporate a multitude of critical functions ideally suited to high-quality music production, the X3 is a fully-equipped music workstation at an affordable price designed for all kinds of musicians from entry-level players to professionals.

- 32 voice polyphonic
- 61 note full-sized keyboard with velocity and aftertouch.
- 6 Megabyte wave memory
- 2 digital multi-effects processors
- stereo outputs
- general MIDI compatible
- 16-track MIDI-standard file sequences
- 3.5" floppy disk drive
- 16 bit CD-quality sound
- RAM card expandable

X3 + 4 = $525 IN FREE ACCESSORIES!

KORG AUDIO GALLERY

AND FREE MIDI KEYBOARD CONTROLLER!
COMPLETE MULTIMEDIA MUSIC SYSTEM FOR MACINTOSH OR WINDOWS COMPUTER SYSTEMS!

INCLUDES SOUND EDITING SOFTWARE!
INCLUDES SEQUENCER W/MUSIC NOTATION!
INCLUDES MIDI SONG LIBRARY AND PLAYER!
INCLUDES SYNTHESIZER!
INCLUDES COMPUTER MIDI INTERFACE!
FREE ROLAND MIDI KEYBOARD CONTROLLER

A complete MultiMedia Music system for your Macintosh or Windows compatible personal computer. Including sequencing, music notation, sound editor, MIDI player, song library, MIDI interface, and a synthesizer sound module with the same KEYBOARD CONTROLLER! Everything you need to start creating computer-based music from day one!

- 16-bit CD quality sound
- 32 voice polyphony
- 4 MEG wave memory
- On board digital effects
- 128 programs & 4 drum programs
- built-in computer MIDI interface
- MIDI in/out/thru
- Trax sequencer and notation package (by Passport)
- MIDI player software
- sound editing software
- Create your own sounds!
- MIDI song disk of great music from leading musicians

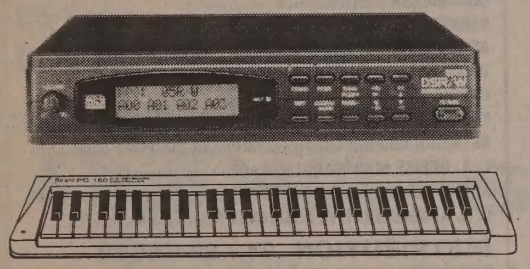
~~$750~~ **SAVE OVER 30%!**

$499

KORG 05R/W

COMPUTER READY SOUND MODULE WITH MAC/IBM MIDI INTERFACE AND FULL SIZE MUSIC KEYBOARD CONTROLLER!

A computer sound expander with the same sounds found in the 01/W synthesizer, all in a half-rack space module! Now including A FREE Roland MIDI Music Keyboard Controller!



- 16 bit CD-quality sound
- 32 voice polyphony
- 16 part multitimbral
- Mac/IBM MIDI interface
- General MIDI
- 228 programs
- 8 drum kits
- Arabic, Pythagorean & other tunings
- 6 MEG waveform memory
- stereo output

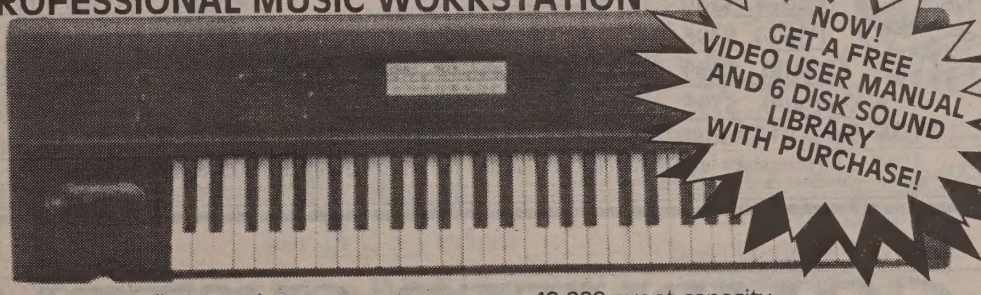
INCLUDES FREE MIDI KEYBOARD CONTROLLER!

~~$1050~~

SAVE OVER 30% **$699**

KORG 01/W FD

PROFESSIONAL MUSIC WORKSTATION



NOW! GET A FREE VIDEO USER MANUAL AND 6 DISK SOUND LIBRARY WITH PURCHASE!

- 16 bit CD-quality sound
- 32 voice polyphony, 16-part multitimbral!
- 16 part multitimbral
- 61 note keyboard
- velocity and aftertouch sensitive
- 6 MEG waveform ROM
- On-board digital multi-effects
- 16-track sequencer
- 48,000 event capacity
- 3.5" floppy disk drive
- individual outputs & headphones
- 2 expansion card slots

$49/mo.
O.A.C.

GOODMAN MUSIC

UNIVERSAL CITY
213 • 845 • 1145
3501 Cahuenga Blvd. West
(Lankershim exit, Hwd. Fwy., turn left)

ANAHEIM
714 • 520 • 4500
1676 West Lincoln Avenue
(Corner of Lincoln & Euclid)

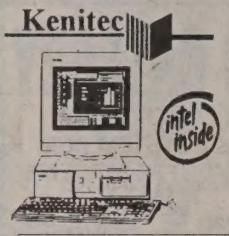
PCW WAREHOUSE

Nationwide's TOP 5 leading computer stores

IBM | HEWLETT PACKARD Authorized Dealer | NEC | COMPAQ

Value point	Vectra	Ready	Presario
486SX25/120$895	486dx-33Vesa	486sx-25..$995	425...$1285
486dx33/212.$1445	4/120mb..$1295	486sx-33.$1295	650....$1285
PS/1	486dx-33Vesa	486CD2..$1495	850...$1629
486sx-33....$1045	4/240mb.$1395	486CD3..$1845	866.....$2065
486dx2-50...$1495			

Kenitec



K-386DX-40	K-486DX-33	K-486DX2-66	P5-60Mhz
4mb/170mb HDD 1.44mb FDD 14" color Monitor SVGA card K/B 101K, Mini tower case mouse	Intel 486dx-33 VESA M/B 4mb/250mb HDD 1.44mb &1.2mb FDD 14" color Monitor 101K/B, Mouse Mini Tower case	Intel CPU 486dx-2/66 4mb/340mb HDD 1.44mb &1.2mb FDD 14" NI color monitor VESA 32 bit card IDE 32 bits CNTR card Cooling Fan	P5 60 Mhz M/B 586 PCI SVGA & IDE PCI 8mb/540mb HDD 1.44mb & 1.2 FDD 15" color Monitor Full Tower case
$995	$1395	$1695	$2495

Technophone PC-405 $275 NEC

NEW Special connect to NoteBook

Notebook

Kenitec 486-33 4mb/120mb $1295
Epson 486-33/120 w/fax modem..1395
Epson 500C 486slc-50 4/180 w/F..2045
COMPAQ Aero 486-25 4/84mb..1295
ToshibaT-4700CS 486dx2-50/200..3945
NEC Versa 486dx2-40 4/250mb....4095

All prices base on cash discount, Availability and Prices are subject to change without notice. Available only at PCWarehouse LA.

TempleCity:818-285-6663 5817 Rosemead Blvd. (At Las Tunas)
Gardena: 310-516-2098 1355 W. 190th St. (405 at Normandie)
City of Industry: 818-913-7121. (17405 E,Gale Ave)
Encino: 818-907-6476 15617 Ventura Blvd.
Irvine: (714-753-9212) 27 Mauchly Suite212. (I-5 at Alton pwky)
Santa Fe Springs: 310-926-7363 13340 Firestone Blvd.
Thousand Oaks: 805-379-0181 3835R Thousand Oaks Blvd. (Westlake Blvd., next to Ralphs)

Finacial Available 90 days Same as cash

On Sale! Wholesale price Guaranteed!

Panasonic Office Automation | PC MAGAZINE EDITORS' CHOICE

P1150..$129
P2030....$195
KX-P2123...$229
KX-P2124..$295
KX-P3124..$315

P1624..$350
P2624..$380
P3624..$395
P4400...$499
KX-P5400...$795

HEWLETT PACKARD Authorized Dealer

HPDeskjet520..$279, 560c.$535
Laser 4L..625,4P..$935,4..$1315
DJ-1200..$1330 1200cps..$1995

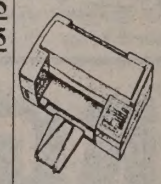
Canon

BJC-600 $565
BJ-10sx...$259
BJ-200e....$299
BJ-230...$395 (wide)

Citizen

GSX-220....$179 (color)
Portable II (2.7lb)...$295

EPSON



Action2250..$129
Ation3250....$179
LQ-570+.....$240
LQ-870....$435
LQ-1070+...$379
LQ-1170...$595
Stylus 300...$229
Stylus 800...$265

Action1500...$629
Scanner600C.$795
Scanner800c.$1195

PCW City of Industry: 818-913-7121 17405 E.Gale Ave. 60 Fwy (E.Azusa)

All prices base on cash discount, Availability and Prices are subject to change without notice.

COMPUTER SYSTEMS

Networks • Workstations • Stand Alones
PC-AT-386-486 Systems & Parts
Microsoft Personal • Business • Home • Office
Upgrades & Trade-ins Available
Electronic Components • Wholesale Prices

MICROSOFT WINDOWS READY TO RUN

REPAIR SERVICE
• MICROSOFT® Certified NT Workstations
• PRINTRONIX Printer Repair
• Service Contracts
• On Site & Depot Repair

HACKER ELECTRONICS (818) 882-7980
21010 Devonshire • Chatsworth, CA

MasterCard VISA DISCOVER

BAM ACCESS TO MARKETS • BAM MEDIA • BAM ACCESS TO MARKETS

California's Computer Magazine

MICROTIMES

EDITOR-IN-CHIEF
Dennis Erokan

PUBLISHER
Chuck Stanley

EDITORIAL 510-934-3700
EDITOR Mary Eisenhart
ASSOCIATE EDITOR Michael Robin
NEWS EDITOR Paul Hoffman
ART COORDINATOR Monika Lukenbill
SENIOR DESIGNER Rick Colby
CONTRIBUTING EDITORS Lenny Bailes, John Perry Barlow, Jennifer Robin Cherniss, Kathleen Creighton, John C. Dvorak, Jonathan E., Bennett Falk,Mitsu Hadeishi, Peter John Harrison, Ed Kahn, Mitchell Kapor, Matthew Leeds, David Morgenstern, Robert Moskowitz, Douglas J. Nakakihara, Fabian Pascal, Tony Reveaux, David A. Simon, CPA, Birrell Walsh, Jim Warren, John Wolcott
CONTRIBUTING WRITERS Mikael Blaisdell, Anna Couey, Rich Grace, Fred Haslam, Fred Lieberman, Woody Liswood, Judy Malloy, Michael Nieman, Kevin Savetz
EDITORIAL ASSISTANT John Downen
BBS RESEARCHER David Remus
CONTRIBUTING PHOTOGRAPHERS Jay Blakesberg, Michael Jay, Susana Millman, Ann Summa, Paul Winternitz

ADVERTISING 213-851-8600
DIVISION BUSINESS MANAGER Amy Barrett
SALES MANAGER (SO. CAL.) Cynthia Lapporte
SENIOR ACCOUNT DIRECTOR (NO. CAL.) Barry Green
NATIONAL ACCOUNT DIRECTOR (SO. CAL.) Jane Shepherd
ACCOUNT EXECUTIVES Melissa Campbell, Marty Gillow, Tracy Longo, Ken Marson, Herb Mendelsohn, Debra Siegel, Chloe Vezo
CLASSIFIED & SUBSCRIPTION MANAGER (NO. CAL.) Jennifer Kosta
ADVERTISING SERVICES ASSISTANT Carolyn Guerrero (Northern California), Warren La Guzza (Southern California)
CO-OP MANAGER Nick Alvarez

PRODUCTION
GROUP PRODUCTION MANAGER Mary Beth DeSantis
ART POOL SUPERVISOR Gary Sparks
PRODUCTION ASSISTANT Matt Matuska
TRAFFIC ASSISTANT Beth Bartels Tarder
ASSOCIATE DESIGNERS Paul Dorian, Michelle Logan
ART STAFF Renée Alborelli, Jennifer Bagwell, Trina Baucom, Donna Bogener, Lance Borde, Gigi, Peter Kowalesyn, Dita Rudinow, Lisa Spencer
CAMERA OPERATOR Jesse Coleman
PROOFREADER John Downen, Becky Call

ADMINISTRATION
CONTROLLER Patricia Buck
SENIOR ACCOUNTANT Linda May
ACCOUNTING Joaquin Arellano, Vickie Liu, Brian Murray, Bonnie Peterson, Sheryl Sindt
CREDIT MANAGER Doug Morgan
HUMAN RESOURCES DIRECTOR Erica Stein-Oakley
NETWORK ADMINISTRATOR/COMPUTER SUPPORT John Dito
L. A. OFFICE MANAGER Raphaella Vaisseau
ADMINISTRATIVE ASSISTANTS Christine Garcia, Leta Jesch
L. A. ADMINISTRATIVE ASSISTANT Michelle Rosendin

DISTRIBUTION 213-851-8600
DISTRIBUTION MANAGER John Erokan
ASSISTANT MANAGER/LA Art Holland
DISTRIBUTION ASSISTANT Tami Martin
DISTRIBUTION CLERK David Remus
FIELD COORDINATORS Roe Eyth, Frank Grygus
DISTRIBUTION Dennis Anderson, John Clefstad, Don Karr, Juan Lau, Jac Michanovic, Robbie Myers, Curtis Ng, Kelly Orr, Joseph Rafalo, Reliable Circulation, John Dimas Rezendes, SPS, Wilfredo Villarroel
PUBLICATIONS *BAM* Magazine, *Drive!* Magazine, *SF Downtown, Home Improvement & Design*

FOUNDERS
Dennis Erokan, Don Hamilton, Pat Hamilton

This Vol. 10 No. 6 April 18, 1994, Whole No. 122. MicroTimes, California's Computer Magazine, is published by BAM Media, Inc., 3470 Buskirk Ave., Pleasant Hill, CA 94523. Phone Advertising Office (510) 934-3700. Los Angeles Office, 6767 Forest Lawn Drive, Suite 110, Los Angeles, CA 90068. Phone (213) 851-8600. San Jose Office, 36 Harold Ave., Suite 2, San Jose, CA 95117. Phone (408) 244-4400. Anaheim Office, 801 East Katella Ave., Suite #210, Anaheim, CA 92805. Phone (714) 939-2809.

MicroTimes™ is © 1994 by BAM Media, Inc. Subscription rates: 13 issues, U.S.: 3rd Class $32 (Allow 3 to 4 weeks for delivery), 1st Class $60 Allow 1 to 2 weeks for delivery). MEXICO & CANADA: Surface Mail $50 (Allow 4 weeks for delivery). Air Mail $70 (Allow 1 week for delivery). OVERSEAS: Surface Mail $50 (Allow 6-10 weeks for delivery), Air Mail $165 (Allow 1 week for delivery). To receive sample issues, please send $4 ($6 for overseas) to cover postage costs. Back issues are $6 each. All rights reserved. Reproduction in whole or in part without permission of Publisher is strictly prohibited. The staff and management of MicroTimes do not advocate or encourage the use of any product or service advertised herein for illegal purposes.

PC FACTORY

intel inside

...Simply A Better Choice For Your Corporate & Personal Business

Apple® Macintosh® · EPSON CUSTOMER CARE CENTER · Panasonic · Texas Instruments · CITIZEN · ZENITH data systems · IBM · AST · • Your Authorized Dealer • · ALR · OKIDATA · NEC · SCO AUTHORIZED RESELLER · TOSHIBA · UNIX · Microsoft · WordPerfect

486 VESA

- 3VL-BUS Slots
- Intel 486 Processor
- Pentium Upgradeable
- 128K Cache on board
- 4MB high speed RAM
- 260MB Hard Drive
- 5.25 & 3.5 Floppy Drives
- VL-Bus IDE I/O Adapter
- GEONOA VL-Bus SVGA Accelerator card with 1MB
- 2 Serial 1 Parallel 1 Game Ports
- 14" VGA Color Monitor 1024x768, Hi Res .28 NI
- 101-Key Keyboard
- Serial Mouse & Mouse Pad
- Desk Top Case with 6 Bayes

486SX-25	$1195
486DX-33	$1395
486DX-66	$1595

486 VESA Pro

- 3 VL-BUS Slots
- Intel 486 Processor
- Pentium Upgradable
- 128K Cache on board
- 8MB high speed RAM
- 345MB Hard Drive
- 5.25 & 3.5 Floppy Drives
- VL-Bus IDE I/O Adapter
- Genoa VL-Bus SVGA Accelerator Card W/1MB
- 2 Serial 1 Parallel 1 Game Ports
- 15" SVGA Color Monitor
- 1024x768 Hi Res .28 NI
- 101-Key Keyboard
- Serial Mouse & Mouse Pad
- Desk Top Case with 6 Bayes

486DX-33	$1799
486DX-66	$1999

2 YEAR WARRANTY

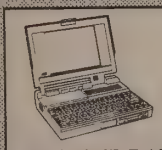
In-House 2 Years Labor 1 Year Parts
Other Configurations Available

COMPAQ SPECIAL

COMPAQ PROLINEA
486DX 33
4MB RAM
120MB HD
DOS, WIN, MOUSE

$1399

IN STOCK • MONITOR EXTRA



AST

BRAVO 4/25s NOTEBOOKS

*DOS, 4MB RAM, VL-BUS VGA
*PCMCIA Type III Slot
*DOS, Windows, Trackball
Active Color

170MB HD	$2899	
Mono	120MB	$1797
Mono	170MB	$1897
DS Color	120MB	$2297
DS Color	170MB	$2497

Call for Other Models

NEC

VERSA 486SL-25/33 NOTEBOOKS

- 4MB RAM Local Bus Graphics
- 2 PCMCIA slots
- DOS, Windows, Trackball

SL 50MHZ
340MB HD
ACTIVE COLOR

$4570

TEXAS INSTRUMENTS

TM 4000E NOTEBOOKS
*Less than 6 Pounds
*4 or 8MB RAM
*DOS, Windows,Trackball

486DX2/50
Mono 200MB $2460

486DX2/50, 200MB
4MB RAM
Active Color $3453

PLEASE CALL FOR LASER PRINTERS

PCF Offers The Best! Training Center

	1/2 Day	Full Day
1-2 People in our classroom	$90	$175
3-4 People in our classroom	$75	$125
More than 4 in our classroom	$60	$100

For Scheduling Call:
310-444-9003

OKIDATA

OL400e
$499

OL410e
800dpi
2MB RAM
4ppm
12 scalable fonts
$669

AUTHORIZED DEALER & SERVICE
Call for Other Models

SHARP

NETWORK PRODUCT

ETHERLINK III
3C 509 1DBT $105

LINKBUILDER FMS
12 PORT 10BT
ETHERNET
HUB $646

HEWLETT PACKARD

Authorized VAR Dealer
CALL
For Best Prices
on ALL
HP Products

microLaser Pro 600
8ppm, 600dpi
6MB RAM
Two Paper Tray

TEXAS INSTRUMENTS

PS23	$1349
PS65	$1549

We Service What Others Sell

- Epson Customer Care Center
- Okidata Authorized
- IBM Lexmark Printer Service Center

Plus Many More...We Service Them All!

Authorized WordPerfect Office & Inform

SALES & SERVICE (310) 444-9003 • FAX: (310) 444-9608

PC FACTORY

2242 Purdue Ave.
West Los Angeles, CA. 90064
Monday-Friday: 9AM-6PM

Becoming BAM Media

Some years ago, in the days when I was free-lancing for *BAM*, I arrived one afternoon at the funky old converted house in Oakland that then served as Corporate HQ, intending to turn in a story. At the receptionist's desk were two little golden-haired girls, busily creating art with whatever materials came to hand.

"Hi, I'm Laney. I'm 5," said the older one. "This is Darcy. She's 3. Aunt Sally will be back in a minute. Do you have a green pen?"

As we dealt with the matter of the green pen, Laney continued, "When I was a baby, I used to sleep in a basket in my daddy's office..."

Eventually Aunt Sally (Sally Engelfried, then the *BAM* receptionist, bass player for the band Yo, and indeed aunt to the kids) returned, I turned in my story and departed, amid many pleasantries from Laney and Darcy. Some months later, I found that their daddy was the big boss, Dennis Erokan.

Cut to the Bammies this past March. There I am at the video monitor contemplating some anomaly when up comes a gorgeous babe in a slinky black dress. "Have you seen my dad?" inquires the babe. I stare at her blankly.

"It's *me*!" she says with plaintive impatience. "*Darcy!*"

Something of the sort has happened to the company, as reflected by our new name of BAM Media and the space-age logo that adorns our covers. We're bigger. We look different. We do quite a few things we didn't do in the olden days.

But we're still us.

BAM's first spinoff was *MicroTimes*, first published in May 1984. It was followed by our car magazine *DRIVE!*, then *San Francisco Downtown*. Just this month, we welcome our newest addition, *Home Improvement & Design*. Each magazine reflects our time-honored philosophy of Always Free, and brings a unique blend of useful resources, both advertising and editorial, to its particular audience.

Almost from the beginning, we've also done things that weren't magazines—the Bammies (Bay Area Music Awards) are a classic example. Coming real soon now is a whole new venture for us—CyberBAM, our cool new music forum on Apple's eWorld online service.

Time passes, things change. The company's about ten times the size it was when I first started free-lancing. When we finally popped out of the last of our funky converted houses in Oakland a couple of years ago, we were forced to move to Real Office Space. Despite oft-expressed fears at the time that we were doomed to Go Corporate, we seem to have come through with our spirit of adventure and sense of opportunity intact.

Meanwhile, Laney, now 16, works here after school. Aunt Sally has recently returned from outside exploits to co-edit the company newsletter.

And, although Dennis's kids are long past that sort of thing, we've still got a baby sleeping in the office. Chloë Laine Dorton, aka The BAMbina, holds court at the workstation of her mom, artist Renée Alborelli, when she's not being carried around the building by some employee taking a mental health break from the pressures of deadline.

We're looking forward to future endeavors as BAM Media. We hope you'll stay with us as we find out what's next.

—Mary Eisenhart

UNITEK™
computer stores

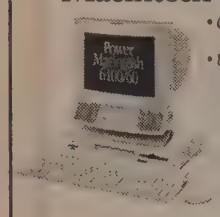
ALL POWER PC®'s IN STOCK

W. LOS ANGELES
12024 Wilshire Blvd.
W. Los Angeles, CA 90025
310.820.2400
Fax.310.826.1455

ENCINO
16027 Ventura Blvd.
Encino, CA 91436
818.907.7878
Fax.818.907.7799

Authorized Reseller
Authorized Service Provider

Apple® Power Macintosh™ 6100/60



- 60MHz Power PC 601 Processor
- 8MB RAM, Exp. to 72MB

8/160
$1449*

*w/Purch. Unitek Ext. KB $149, Clarisworks 2.0 $189

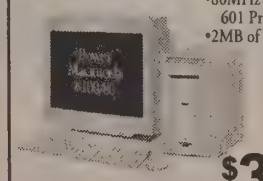
Apple® Power Macintosh™ 7100/66

- 66MHz Power PC 601 Processor
- 8MB RAM, 32K Cache

8/250
$2399*

*w/Purchase of Unitek Ext. KB $149, Clarisworks 2.0 $189

Apple® Power Macintosh™ 8100/80

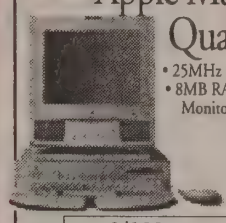


- 80MHz Power PC 601 Processor
- 2MB of VRAM

8/250
$3626*

*w/Purchase of Unitek Ext. KB $149, and Any Monitor

Apple Macintosh Quadra® 660AV



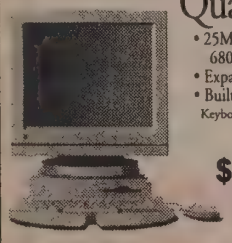
- 25MHz G68040 25/55MHz DSP
- 8MB RAM, Expandable to 68MB
- Monitor & K.B. Not Included

Special Buy

8/230	8/230/CD
$1429*	**$1689***

* With purchase of Unitek Ext. KB $149 and Clarisworks 2.0 at $189.

Apple Macintosh Quadra® 610



- 25MHz Motorola 68040 Processor
- Expandable to 68MB of RAM
- Built-In Ethernet

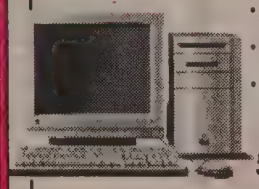
Keyboard and Monitor not included.

8/160
$1145*

* With purchase of Unitek Ext. KB $149, and Any Monitor

LOWER PRICES

Apple Macintosh Quadra® 800

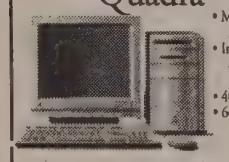


- 33MHz 68040 with integrated FPU
- Room for one 5.25 in. & 2 Half-height Drives
- Keyboard & Mon. Not Incl.

8MB/230HD
$2099*

* With purchase of Unitek Ext. KB $149

Apple Macintosh Quadra® 840AV



- Most powerful, feature-rich system Apple has ever built.
- Innovative architecture that delivers new capabilities in telecommunications, video and speech
- 40MHz 68040 processor
- 66MHz digital signal processor

Keyboard and Monitor not included.

8/230
$2575*

* With purchase of Unitek Ext. KB $149 and Clarisworks 2.0 at $189.

LOWER PRICES

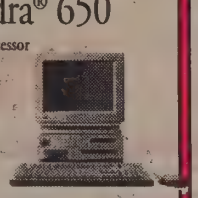
Apple Macintosh Quadra® 950

- Fast 33MHz 040
- Dual SCSI Capability!
- Greatest Expandability!
- Excellent choice for multi-media professionals
- Keyboard & Monitor Not Included

16/1GB
$3939

EXCEPTIONAL VALUE!

Apple Macintosh Quadra® 650



- 33MHz 68040 Processor w/built-in Math Co-processor

8/230
$1715*

*w/Purch Ext. KB $149 Clarisworks 2.0 $189

Keyboard and Monitor not included

Apple Macintosh PowerBook® 145B

- Solid Macintosh Performance and Flexibility Built In!
- Ergonomic Design!
- Original Hard Disk

4/80
$1189*

*w/Purchase Clarisworks $189

Apple Macintosh PowerBook® 165

- Color Video Output
- 33MHz 68030 Microprocessor
- Original Hard Disk

4/80
$1499*

*w/Purchase of Clarisworks $189

Apple Macintosh PowerBook® 180

- Gray Scale Active Matrix Display!
- Color Video Output!
- High Performance & incredible speed
- Includes Floppy!
- Original Hard Disk

4/80
$1819*

*With Purchase of Clarisworks 2.0 $189

Apple Macintosh PowerBook® 180C

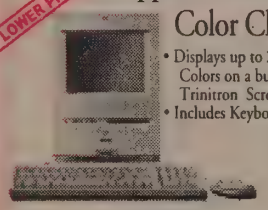
- NEW COLOR ACTIVE MATRIX
- A member of the portable Macintosh product line
- Original Hard Disk

4/80
$2249*

*With Purchase of Clarisworks 2.0 at $189

LOWER PRICES

Apple® Macintosh® Color Classic®



- Displays up to 256 Colors on a built-in Trinitron Screen
- Includes Keyboard!

4/80
$869

Apple® Macintosh Quadra® 605

- 25MHz 68LC040 Processor
- Expandable to 36MB of RAM
- 512K of on-board VRAM

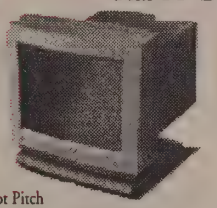
Keyboard and Monitor not included

4/80
$679*

* With purchase of Unitek Ext. KB $149 and Clarisworks 2.0 at $189

NEW

Apple® Macintosh® Color Plus 14" Display



- .28 Dot Pitch
- 640x480 resolution

$305

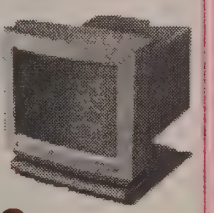
Apple Macintosh® 16" Color Display

- Up to 70% more work area than std Monitors
- Three ADB Ports

$929

NEW

Apple® Multiple Scan™ 20" Display

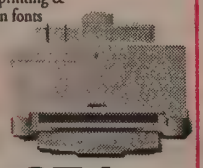


- Trinitron Screen
- Digital Control
- 20" Screen

$1949

LOWER PRICES

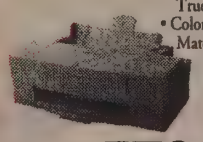
Apple® StyleWriter®II



- 360 dots-per-inch quality
- Grayscale printing & 35 built-in fonts

$274

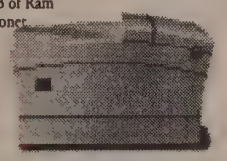
Apple® Color Stylewriter® Pro



- 360DPI Resolution
- 64 Scalable Truetype Fonts
- Color Sync color Matching Tech

$579

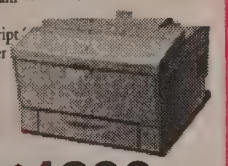
Apple LaserWriter Personal™ 320



- 300DPI
- 4 Pages Per minute
- 2MB of Ram
- w/Toner

$869

New Apple LaserWriter Select™ 360



- 600 Dot per inch
- 10 Pages Per minute
- 7MB Ram
- Adobe Postscript
- w/Toner

$1399

Apple LaserWriter® Pro 630

- 600 DPI
- 8 Pages per minute
- 8MB Ram
- Adobe Postscript II
- w/Toner

$1899

Apple LaserWriter® Pro 810

- 300, 400 (default) 600 or 800 DPI
- 20 Pages Per Minute
- 8MB Ram
- 64 Scalable Fonts

$CALL

Apple CD™ 300

300 Int. $289
300 Ext. $379
Multimedia FOR MAC

$593

PLI

PLI 105MB Ext. Drive $489
PLI 88MB Ext. Drive $479
PLI 88MB Unf. Cont. $109
PLI 105MB Unf. Cont. $79

Global Village

Powerport Mercury 19.2/14.4 ..... $339
Powerport Gold 14.4/14.4 ..... $299
Powerport Bronze 24/96 ..... $119
TELEPORT Mercury $339

Apple Newton MessagePad™

- Include Stylus 2
- Batteries Included

$569

Apple Laserwriter Select™ 300

- 300DPI
- 5PPM
- 512K

$539

*Limited time/Qty

FREE Surge Protector (w/purchase)

FREE Mouse Pad (No Purchase Necessary)

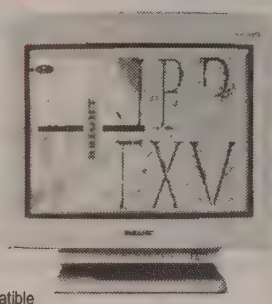
Apple, the Apple logo, LaserWriter, StyleWriter, Mac, & Macintosh are registered trademarks of Apple Computer Inc. PostScript is a trademark of Adobe Systems Inc. Classic is a registered trademark, licensed to Apple Computer, Inc., PowerBook Duo, Macintosh, System 7 & Macintosh Centris are trademarks of Apple Computer, Inc. All Prices reflect a cash discount. Prices subject to change w/o notice. Limited to stk. on hand. Unitek is not responsible for typographical errors! ABSOLUTELY NO DEALERS! Sony, Trinitron, Multiscan, and Super Fine Pitch are trademarks of Sony.

SONY. UNITEK™ Trinitron®

Authorized Dealer

90 DAY FREE FINANCING

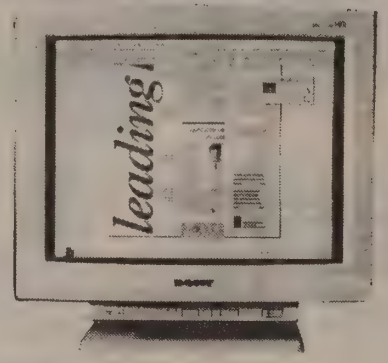
NEW! GDM-17se



- Mac Compatible
- 17" Super Fine PitchTM Multiscan® Trinitron® color graphic display
- Unique ASIC design automatically adjusts image geometry parameters across a continuous range of scan frequencies
- Energy Star and VESA-DPMS compliant
- .25 mm Aperture Grille pitch
- Maximum resolution of 1280 x 1024 at 77 Hz refresh
- Horizontal scan range of 31.5 to 82 kHz
- Easy-to-use digital control of screen images
- Includes color temperature control for publishing, photography, imaging, and design applications
- Swedish MPR II compliant

$1099

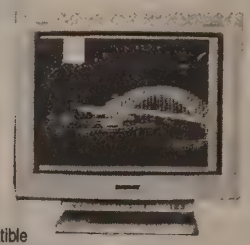
GDM-2036S



- Mac Compatible
- 20" Super Fine PitchTM Multiscan® Trinitron® color graphics display monitor
- .30mm Aperture Grille pitch
- Maximum resolution of 1280 x 1024 refresh (non-interlaced)
- Variable scan frequency of 30 to 71 kHz
- MRP II

$1839

GDM 2038



- Mac Compatible
- 20" Super Fine PitchTM Multiscan® Trinitron® color graphics display monitor
- .30 mm Aperture Grille pitch
- Maximum resolution of 1280 x 1024 at 80 Hz refresh (non-interlaced)
- Variable scan frequency of 28 to 85 kHz
- Overscanning for crisp edge-to-edge images
- Sony Display Memory System provides easy-to-use digital control of screen images
- Includes color temperature control for publishing, photo and design applications
- Full compliance with Swedish MPR II standards for VLF/ELF magnetic and electrical emissions

$1945

SPECIAL BUYS

SONY CPD-1730 Refurbished

- Mac Compatible
- 17" Super Fine Pitch TM Multiscan® Trinitron® color display
- .25mm Aperture Grille pitch
- Maximum resolution of 1024 x 768 at 72 Hz refresh (non-interlaced)
- Variable scan frequency of 28 to 59 kHz
- Overscanning for crisp edge-to-edge images
- Sony Display Memory System provides easy-to-use digital control of screen images
- Full compliance with Swedish MPR II standards for VLF/ELF magnetic and electrical emissions

$765

SPECIAL BUYS

SONY GDM-1936 • Over 100 Units in Stock • Refurbished

- Mac Compatible
- 20" Super Fine Pitch TM Multiscan® Trinitron® color graphics display monitor
- 30mm Aperture Grille pitch
- Maximum resolution of 1280 x 1024 refresh (non-interlaced)
- Variable scan frequency of 30 to 71kHz

$1329

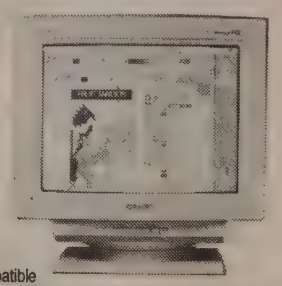
Sony CPD-1320

- MAC Compatible
- 14" Super Fine Pitch™ Trinitron® Multiscan™ monitor
- .25mm Aperture Grille pitch
- Resolution of 640 x 480 (VGA)
- Scan frequency of 31.5 kHz
- Includes VGA cable and tilt/swivel stand

$339

Sony CPD-1430

Trinitron Digital Control Color Monitor

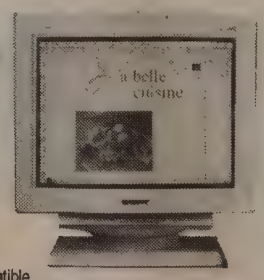


- Mac Compatible
- 14" Super Fine PitchTM Multiscan® Trinitron® color display
- .25mm Aperture Grille pitch
- Maximum resolution of 1024 x 768 at 72 Hz refresh (non-interlaced)
- Variable scan frequency of 28 to 58kHz
- Overscanning for crisp edge-to-edge images
- Sony Display Memory System provides easy-to-use digital control of screen images
- Full compliance with Swedish MPR II standards for VLF/ELF magnetic and electrical emissions

$519

Sony CPD-1730

Trinitron Digital Control Color Monitor



- Mac Compatible
- 17" Super Fine PitchTM Multiscan® Trinitron® color display
- .25mm Aperture Grille pitch
- Maximum resolution of 1024 x 768 at 72 Hz refresh (non-interlaced)
- Variable scan frequency of 28 to 59 kHz
- Overscanning for crisp edge-to-edge images
- Sony Display Memory System provides easy-to-use digital control of screen images
- Full compliance with Swedish MPR II standards for VLF/ELF magnetic and electrical emissions

$935

Sony, Trinitron, Multiscan, and Super Fine Pitch are trademarks of Sony.

UNITEK computer stores

W. LOS ANGELES
12024 Wilshire Blvd.
West Los Angeles, CA 90025
310.820.2400
Fax . 310 . 826 . 1455

ENCINO
16027 Ventura Blvd.
Encino, CA 91436
818.907.7878
Fax . 818 . 907 . 7799

UNITEK™ computer stores

W. LOS ANGELES
12024 Wilshire Blvd.
West Los Angeles, CA 90025
310.820.2400
Fax . 310 . 826 . 1455

ENCINO
16027 Ventura Blvd.
Encino, CA 91436
818.907.7878
Fax . 818 . 907 . 7799

FULL SERVICE CENTER • 90-DAY FREE FINANCING • Open Monday-Friday 9am-7pm/Saturday 10am-4pm

HEWLETT PACKARD

LASERJET PRINTERS

HP Laserjet 4L w/Toner	$619
HP Laserjet 4ML w/Toner	979
HP Laserjet 4P w/Toner	939
HP Laserjet 4MP w/Toner	1319
HP Laserjet 4 w/Toner	IN STOCK
HP LaserJet 4+ w/Toner	CALL
HP Laserjet 4M w/Toner	IN STOCK
HP Laserjet 4SI w/Toner	IN STOCK
HP Laserjet 4SI MX w/Toner	IN STOCK
HP Jetdirect (NETWORKING) Card	Available

INKJET PRINTERS

Deskjet/Deskwriter 520 (new)	$289
Deskjet/Deskwriter 560C (new)	559
Deskjet 500/Deskwriter	288
Deskjet/Deskwriter 550C	479
Deskjet/Deskwriter 310 Portable	308
Deskjet 1200C & 1200CPS	IN STOCK

SCANNERS

HP ScanJet IIP w/ISA CTRL	$679
HP ScanJet IIP w/MAC CTRL	679
HP ScanJet IICX w/ISA CTRL	919
HP ScanJet IICX w/MAC CTRL	919
HP ScanJet Doc. Feeder	489

PLOTTERS

HP DraftPro Plus	CALL
DesignJet 600	CALL
DesignJet 650C	CALL

Authorized Service Provider **TOSHIBA** Authorized Dealer

T1910
486SX-33, 4MB RAM LCD VGA, Win, DOS, Trackball
120HD.....1499
200HD.....1749

T1910CS
486SX-33, 4MB RAM Passive Matrix Color, Win, DOS
120HD.....2469
200HD.....2689

T1950
486DX2-40, 4MB Ram, LCD VGA, Mouse, Win
120HD.....1929
200HD.....2139

T1950CT
486DX2-40, 4MB RAM, Active Color Matrix, Mouse, Win
200HD.....2979
320HD.....3299

T4600C
486SL-33, 4MB RAM, Active CLR Screen, DOS, Win, Mouse
200HD.....4039
320HD ....CALL

T4700CS
486DX2-50, Dual Scan, CLR Screen, 8MB Ram, 6.9lbs.
200HD.....4185
320HD ....CALL

T4700CT
486DX2-50, Active CLR Screen, 1.44, 8MB RAM, DOS, Win
200HD ....CALL
320HD ....CALL

Protege T3400/CT
486SX-33, 4MB RAM, 1.44, DOS, Win, 3yr Warranty
3400 120LCD....2199
3400 120HD.....3375

T6600C
486DX2-66, 8MB Ram Active Matrix VGA
NEW
510HD.....CALL
510HD w/CD...CALL

Authorized Sales & Service **OKIDATA** Available On Site Service

OL400E
- 4PPM
- 300DPI
- 512K RAM
- 100 Sheet Tray

$429*
*with Purch. 1MB Memory...$79

OL 410E
- 4PPm
- 600DPI
- 2MB Ram
- 100Sheet Tray

$645

OL810
- 8PPM
- 300DPI
- 1MB Ram
- 200 Sheet Tray
- Scalable Fonts

$865

OL830 Plus
- 8PPM
- 300DPI
- 2MB RAM
- Adobe Postscript
- 43 Fonts

$1029

OL850
MAC COMPATIBLE
- 8PPM
- 300DPI
- 2MB Ram
- Adobe Postscript
- 61 Fonts
- Appletalk

$1149

ML380
- 240 CPS Dot Matrix
- 24 Pin

$217

ML320/321
- 300 CPS
- Dot Matrix
- 9 Pin

$319/429

ML590/591
- 360CPS
- Dot Matrix
- 24 Pin
- Color Optio

2yr. Warranty
$429/569

DOC IT
- ALL IN ONE
- 8PPM Laser
- FAX Mach'e
- Scanner
- Copier

CALL FOR DEMONSTRATION

NEC
Authorized Dealer

MONITORS

NEC 14" Color Monitor	$329
NEC 3V 15"	479
NEC 3FGE 15"	569
NEC 4FGE 15"	639
NEC 5FGE 17"	1009
NEC 5FGP 17"	1099
NEC 6FGP 21"	1999

NOTEBOOKS
- VERSA 40EC 120/250 .....$3885/4269
  486DX2-40, 4MB, Active Color
- VERSA 750EC 340HDD.....5495
  486DX75 4MB RAM Active Color Matrix
- VERSA 50EC 209/340 .....CALL
  486DX2-50, 4MB, Color Active

PRINTERS

Superscript 610 6PPM	$639
Silentwriter 640 6PPM	789
Silentwriter 1097 10PPM	1419

COMPAQ
Authorized Dealer & Service Center

Contura 4/25
486SL/25, 4MB, Bundle
120MB $1679
209MB 1969

LTE Elite 4/40C
486DX2-40, 4 MB, Color Screen
DOS, Windows & Trackball
170MB $3135

LTE Elite 4/75CX
486DX4-75, 8 MB RAM, Active Color Screen
DOS, Windows, Pointing Device
340MB $5699
510MB 6049

COMPAQ SERVERS
Proliant 1000
Proliant 2000
Proliant 4000
Prosignia Systems
Call for Configuration & Price

Authorized Service Provider — IBM Business Partner — Authorized Dealer

ValuePoint SI
- 486SX-25
- 120MB HDD
- 4MB, 3x3
- K.B., DOS, WIN

6381F30
Monitor Not Incl.
$929

ValuePoint SI
- 486DX-33
- 120MB HDD
- 4MB, 3x3
- K.B., DOS, WIN

6381M30
Monitor Not Incl
$1279

ValuePoint SI
- 486DX2-66
- 120MB HDD
- 4MB, 3x3
- K.B., DOS, WIN

6381W30
Monitor Not Incl
$1699

ThinkPad 350/350C
- 486SL-25
- 4MB
- 25MB

350 4/125 .....$1799
350C 4/125 ..$2199

ThinkPad 500
- 486SL2-50
- 4MB, 170HD
- LCD, MONO

$1949

ThinkPad 750/750C
- 486SL2-50
- 4MB, 170HD
- LCD, MONO

$CALL

DESKPRO 4/25IS
486SX-25, 4MB, DOS, WIN
Local Bus, 1.44, Keyboard
120MB $1059
240MB 1169

DESKPRO 4/66i
486DX2-66, 4MB, DOS, WIN, LOCAL BUS, Q-VISION CARD
240MB $2069
340MB 2195

IBM is a registered trademark of International Business Machines Corporation
Thinkpad trademark of International Business Machines Corporation

Prices subject to change without notice. Limited time & quantity. *OAC Ask for Details. Prices reflect cash discount.

INDUSTRY INSIGHT

Microcode, Power Macs, And Mergers

AMD Wins Right to Use Intel Microcode Legally

BY PAUL HOFFMAN

In a sharp rebuke to Intel, a federal court jury decided that Advanced Micro Devices can legally continue to copy Intel's CPUs under a 1976 agreement. The agreement, which expires in 1996, allows AMD to be a "second source" for Intel's CPUs.

At the time that the agreement was signed, it was standard industry practice for major suppliers like Intel to allow another, smaller company to make the same CPUs. This arrangement helped reassure chip buyers who worried that the larger company would not keep up with demand or, worse, would drop the line of chips for more interesting ones in future years. Intel had tried to get out of the contract by saying that "microcomputers" in the contract didn't refer to the CPU chips

This is the second time the case was tried; the first time, AMD lost. However, the judge in that case decided that Intel withheld important internal documents that would have helped AMD's case. In fact, the jury in the current case took less than ten hours to come to a unanimous verdict in favor of AMD.

As expected, Intel will appeal the verdict. And Intel will continue separate lawsuits against AMD that are related to this one but rest on different disagreements. Those suits still put a damper on some computer manufacturers' desire to buy AMD chips, but the current case should relieve most of their concerns.

The victory for AMD was a costly one: AMD estimates that its legal fees, lost time, and associated court costs for this case hover near $100 million, a staggering amount for a company AMD's size. Many speculate that Intel, being many times larger than any of the clone makers, is using lawyer costs to reduce the profitability of its competitors. Michael Slater, publisher of the widely read *Microprocessor Report*, says, "Intel's strategy appears to be one of burying its competitors in litigation: even if Intel ultimately loses, as it has with regularity lately, Intel benefits from the uncertainty it creates in the market and the drain on its competitors' resources."

AMD's president Jerry Sanders made it clear that AMD will not rest on its laurels after winning the case. AMD will continue to develop Intel clones that do not rely on the disputed license because the license is only good for two more years. For example, AMD has so far decided not to clone the Pentium processor, probably due to its large manufacturing cost. Instead, AMD will design better clones of Intel's 486 line, which should sell well for at least the next five years.

Michael Slater, publisher of the widely read *Microprocessor Report*, says, "Intel's strategy appears to be one of burying its competitors in litigation: even if Intel ultimately loses, as it has with regularity lately, Intel benefits from the uncertainty it creates in the market and the drain on its competitors' resources."

Copyright © 1994 by Paul Hoffman. All rights reserved. *Paul Hoffman is an industry analyst who has been covering microcomputer technology for fifteen years. He also writes popular computer books and is the president of Proper Publishing. He can be reached at phoffman @netcom.com.*

APPLE SHIPS POWER MACS

The much-anticipated Power Macs, Macintosh computers based on the PowerPC RISC CPUs, were released in a storm of publicity and advertising unmatched in Apple's history. Power Macs are the first easily affordable computers based on powerful RISC processors that run common applications.

Apple was well prepared at the introduction, having prepared its software and hardware developers for over a year so that the new systems were completely compatible with the current Macintoshes. The new systems have been selling briskly, although there are a few complaints about Apple's marketing of them as Windows-compatible.

Computer Pacer

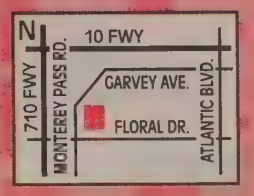
1460 Monterey Pass Rd. #B, Monterey Park, CA 91754

To Order Please Call (213) 262-1087

FAX (213) 264-1481 • 24 Hour FAX Order Line

OPEN 7 DAYS

STORE HOURS: MON - FRI 9AM -6PM
SATURDAY 10AM - 3PM SUNDAY 1PM - 5PM



We Accept VISA, MasterCard & American Express

★ Great Quality ★ Supreme Performance ★ Low Low Prices!

We Accept Government Purchase Orders 30 Days – 45 Days
FREE *3 Button Serial Mouse*
FREE *CD Multimedia Graphic, 200 Games w/System Purchase*

Custom Configurations Available

Who's Who Registry 1994-1995

SPECIAL THANKS FOR CHOOSING US
Coca-Cola • County of Los Angeles
Honeywell • City of Monrovia
Naval Warfare • USC

FAX/MODEMS

2400 Internal Modem w/ phone cable and software $39
9600 Fax/2400 Int. Modem w/ phone cable and Superfax software for Windows $55
14,400 Int. Fax Modem .32, .42 w/ phone cable and Superfax software $139

ADD ON CARDS

32 Bit VL-Bus IDE I/O $39
Diamond Stealth VLB 32-Bit 16.7 Million Color Super VGA Graphic Card w/One Meg $149
32 Bit VL-Bus Graphic Card Expandable to 2MB $98

HAND SCANNER FOR WINDOWS

Windows-based Photo Deluxe image processing software converts black & white images into 256 greyscale images; includes GO-OCR software; features side-mounted buttons and rear wheels for easy scanning $198

NETWORKS

Novell Netware
Up to 1000 Users ..... CALL
Ethernet Network Card 16 bit $79

ACCESSORIES

Power Center Surge Protector w/Modem Protection $35
Joystick $15
Mouse Stage $15

KEYBOARDS

101 Enhanced Keyboard w/Deskcover ..$28
Speed Adjustable 101 Enhanced Keyboard $15

POWER SUPPLIES/UPS

200 Watt UL $38
230 Watt $48
UPS 600 American Power 600VA; Smart network interface port; Smartboost™ for chronic low-line and extended burnout protection; microprocessor $499

CASES

Vertical Case w/P/S $59
Desktop Case w/P/S $69
Super Digital Vertical w/250 P/S $99
Heat Sink Fan $9

486 Intel-33SX
Pacer Masters

- 486SX 33MHz
- 4MB RAM, Exp. to 32MB
- AMI BIOS, 8 Expansion Slots
- Math Coprocessor Socket
- TEAC 1.2 High Density Floppy
- TEAC 1.44 High Density Floppy
- Conner 170 Meg Hard Disk Drive
- Dual Hard/Floppy Controller
- 2 Serial, Parallel, Game
- Vertical or Desktop Case
- 230 Watt Power Supply
- Hi Color Super VGA Graphic Card 1024x768
- 14" Super Hi-Res Edge to Edge VGA Color Monitor Tilt Swivel 1024x768 .28 dp
- 101 Speed Adjustable Enhanced Keyboard
- Hi Res Serial Mouse w/Mouse Pad
- Cables and Manuals

ONLY $999 Complete

486-40
Pacer Road Runner

Special

- 80486 40MHz w/128k
- 4MB RAM, Exp. to 32MB
- 486-40 CPU, AMI BIOS
- Built-in Math Coprocessor
- TEAC 1.2 High Density Floppy
- TEAC 1.44 High Density Floppy
- 270 Meg Hard Disk Drive
- Dual Hard/Floppy Controller
- 2 Serial, Parallel, Game
- Vertical or Desktop Case
- 230 Watt Power Supply
- Super Hi Color VGA Graphic Card w/1 Meg
- 14" Non-Interlaced Super Hi-Res Edge to Edge VGA Color Monitor Tilt Swivel 1024x768 .28 dp
- 101 Speed Adjustable Enhanced Keyboard
- Hi Res Serial Mouse w/Mouse Pad
- Cables and Manuals

ONLY $1,195 Complete

486DX-33 VL Bus
Pacer Supreme

- 80486DX 33MHz w/256K Cache
- 4MB RAM, Exp. to 128MB
- Intel 486DX-33 CPU, AMI BIOS
- Upgradable to 66/Intel Overdrive Socket Ready
- 3VL Bus Slots
- Built-in Math Coprocessor
- TEAC 1.2 High Density Floppy
- TEAC 1.44 High Density Floppy
- 270 Meg Hard Disk Drive
- Dual Hard/Floppy Controller
- 2 Serial, Parallel, Game
- New Generation Deluxe Vertical or Desktop Case
- 230 Watt Power Supply
- 32 Bit VL Bus 16.7 M Color Graphic Accelerator w/1 Meg exp. to 2 Meg on board
- 14" Non-Interlaced Super Hi-Res Edge to Edge VGA Color Monitor Tilt Swivel 1024x768 .28 dp
- 101 Speed Adjustable Enhanced Keyboard
- Hi Res Serial Mouse w/Mouse Pad
- Cables and Manuals

ONLY $1,389 Complete

The Graphics Maker

- 80486DX2-66 VL Bus w/256K Cache
- 8MB RAM, Exp. to 128MB
- 486DX2-66 CPU w/Heat Sink
- Intel Overdrive Ready
- TEAC 1.2 High Density 5-1/4 Floppy
- TEAC 1.44 High Density 3-1/2 Floppy
- 420 Meg IDE Hard Disk Drive
- 32 Bit VLB Dual H/F Controller
- AT I/O (2 Serial, 1 Parallel, 1 Game)
- 32 Bit VLB 16.7M Color Graphics Accelerator w/1 Meg Exp. to 2 Meg on Board
- Deluxe Vertical or Desktop Case
- 230 Watt Power Supply
- 15" Low Radiation SVGA Non-Interlaced Color Monitor w/Tilt & Swivel, Edge to Edge 1280x1024 .28 dot pitch
- 101 Speed Adjustable Enhanced Keyboard
- Hi Res Serial Mouse w/Mouse Pad
- Cables and Manuals

ONLY $1,798 Complete

486DX2-66
Pacer Pro Audio

- 80486 DX2 66 VL Bus w/256k Cache
- 4MB RAM, Exp. to 128MB
- 486DX2-66 CPU, heat sink
- Intel Overdrive Socket Ready
- TEAC 1.2 High Density Floppy
- TEAC 1.44 High Density Floppy
- 345 Meg Hard Disk Drive
- 32 Bit VL Bus Dual/Hard Floppy Controller
- 2 Serial, Parallel, Game
- New Generation Deluxe Vertical or Desktop Case
- 230 Watt Power Supply
- 32 Bit VL Bus 16.7 M Color Graphics Accelerator w/1 Meg exp. to 2 Meg on board
- 14" Non-Interlaced Super Edge to Edge VGA Color Monitor w/Tilt & Swivel, 1024x768 .28dp
- 101 Speed Adjustable Enhanced Keyboard
- Hi Res Serial Mouse w/Mouse Pad
- Cables and Manuals

Only $1,669 Complete

PCI/ISA DX2-66
Super Pacer

- PCI/ISA w/256K Cache
- Intel 486DX2-66 CPU
- 8MB RAM Exp. 112
- Exp. to 512K Cache
- TEAC 1.2 High Density Floppy
- TEAC 1.44 High Density Floppy
- 424 Meg Hard Disk Drive
- Dual Hard /Floppy Controller
- 2 Serial, Parallel, Game
- New Generation Deluxe Vertical or Desktop Case
- 250 Watt Power Supply
- Super VGA Graphic Accelerator Card w/1 MB
- 15" Flat Screen Low Radiation Non-Interlaced Super Edge to Edge VGA Color Monitor w/Tilt Swivel 1280x1024
- 101 Speed Adjustable Enhanced Keyboard
- Misumi Double Speed CD-ROM 250ms
- CD ROM Interface Card
- Hi Res Serial Mouse w/Mouse Pad
- Cables & Manuals

Only $2,069 Complete

Pentium™ PCI System-66

NEW

- Intel Pentium 66MHz CPU w/Heat Sink
- 256K Cache, Exp to 512K Cache
- 8MB RAM, Exp. to 112MB
- TEAC 1.2 High Density Floppy
- TEAC 1.44 High Density Floppy
- 420 Meg Hard Disk Drive
- Dual/Hard Floppy Controller
- 2 Serial, Parallel, Game
- New Generation Deluxe Vertical or Desktop Case
- 250 Watt Power Supply
- PCI Graphic Accelerator Card w/One Meg
- 15" Flat Non-Interlaced Low Radiation Super Hi Res Edge to Edge VGA Color Monitor Tilt Swivel 1280x1024 .28dp
- 101 Speed Adjustable Enhanced Keyboard

Only $2,795 Complete

Multimedia Machine

BEST BUY

- 80486DX2-66 VL Bus w/256K Cache
- 8MB RAM, Exp. to 128MB
- 486DX2-66 CPU w/Heat Sink Fan
- Intel Overdrive Ready
- TEAC 1.44 High Density 3-1/2 Floppy
- Volume/Balance Control
- 72 Watts Amplifier, 20 per Channel
- Built-in Speakers Chassis w/Power Supply
- 420 Meg IDE Hard Disk Drive
- 32 Bit VLB Dual H/F Controller
- 32 Bit VLB Graphics Accelerator w/One Meg
- Double Speed CD ROM w/250ms Access time
- Kodak CD Compatible
- CD ROM Interface Card
- SoundBlaster Pro 16 Bit Access Sound Card
- Sound Software & Encyclopedia CD Disk
- 15" Low Radiation SVGA Non-Interlaced Color Monitor w/Tilt & Swivel, Edge to Edge 1280x1024 .28 dot pitch
- 101 Speed Adjustable Enhanced Keyboard

FREE 3 Button Serial Mouse
FREE 200 Games Multimedia CD ROM Disk
FREE Removable Hard Drive Kit w/System Purchase

ONLY $1,999 Complete

$$$ APRIL SPECIALS $$$

MULTIMEDIA SPECIAL

Panasonic CD ROM 280MS
CD ROM Interface Card
Sound Card & Sound Software
External Sound Speakers

$259

DOUBLE SPEED SPECIAL

Mitsumi Double Speed CD ROM 250MS
CD ROM Interface Card
Sound Blaster Card, 16 Bit Access
CD Title Encyclopedia
Labtec Stereo Speakers

$329

- TERMS: C.O.D., Cash & Company POs on approval.
- Prices do not include shipping.
- Prices subject to change without notice.
- Listed names of products are registered trademarks of their respective companies.
- Pacer USA is a trademark of Power Tech. Harrington
- 1 Year Warranty Parts & Labor

As Novell integrates its networking with these mainstream applications,

it will certainly challenge Microsoft, which has failed to make much headway in the network market.

The Power Macs come in three series. The 6100s have the same physical characteristics as the Quadra 610: a low, flat system unit designed for compactness. The 7100s resemble the Quadra 650: taller than the 6100s with room for a few expansion boards and drives. The 8100s are akin to the Quadra 800s: tower-shaped systems that will be mostly used as workgroup servers.

Although they physically resemble the Quadra series, the new Power Macs are significantly faster for only a small amount of money more than their Quadra counterparts. For example, the Power Mac 7100/66 runs typical business and graphics programs two to four times faster than a Quadra 650. However, those speeds will go up even more when the manufacturers of those programs produce PowerPC-specific versions of the programs. It is estimated that spreadsheet and graphics programs will gain another doubling in speed when they are converted to the PowerPC.

Apple's extensive efforts to make sure current software ran with the PowerPCs paid off: only a few programs, mostly fax software, didn't work. (An interesting side note: Fax software written for Windows 3.1 rarely works under Windows NT. What is it with fax software that makes it so unportable?) The vast majority of programs work just fine, and the number of reports of bugs is phenomenally low, even after weeks of new users trying everything on their systems. Most dealers report that Mac users who came to see the new systems were impressed with their speed and low cost.

Probably the darkest spot on the Power Mac marketing is Apple's claim that the Power Macs can run programs that were written for Microsoft Windows. This claim is only vaguely true. In order to even try this feat, you need 16MB of RAM, adding about $600 to the price of the system. Even with all that RAM, you need SoftWindows, a program that is only included if you buy the system with the 16MB; otherwise it costs about $400. However, SoftWindows is so slow as to be almost unusable. On a 7100, SoftWindows runs Windows programs about as fast as a 20MHz 386SX system, which is barely tolerable for most programs. For example, Microsoft Word for Windows is essentially unusable at that speed.

Apple's fixation on pretending that the Power Macs are Windows-compatible will probably come back to haunt it when corporate buyers realize that they've been had. Instead, Apple could have spent the time and money coming up with a workable, inexpensive plug-in board that has a 486SX CPU and 4MB of RAM. For essentially the same cost as the additional 12MB you need to run Windows exceptionally slowly, you could have a real Windows and Mac in a single box. Apple would then not be in the position of lying about what you can really do with their otherwise remarkable systems.

MEGA-MERGERS IN THE SOFTWARE INDUSTRY: WHERE DO THEY LEAVE THE USERS?

March was the month that the PC and Macintosh software industry shifted, but it is not clear where it shifted to.

First, Aldus and Adobe Systems agreed to merge their operations, making a single desktop publishing giant with annual sales expected to be about $500 million. A week later, industry giant Novell bought word processing powerhouse WordPerfect and, at the same time, bought the rights to Borland's popular Quattro Pro spreadsheet. Novell will in one fell swoop become a company with almost $2 billion in sales, behind only Microsoft.

In fact, Microsoft's name came up almost as often as those who were merging as the news spread. In the case of the Aldus and Adobe merger, the big question was whether the new larger company could keep Microsoft out of the mainstream of the publishing and drawing package market. Microsoft has dabbled at the low end of both markets, but has so far kept away. On the other hand, Microsoft Word now can perform most of the tasks that only a few years ago required PageMaker or its competitors. In the case of the Novell-WordPerfect acquisition, it is obvious that Novell is putting itself up directly against Microsoft by buying the leading word processor and a leading spreadsheet. As Novell integrates its networking with these mainstream applications, it will certainly challenge Microsoft, which has failed to make much headway in the network market.

Both mergers have started to worry users of the four company's products. Whenever two companies merge, it is hard to tell how the current customers will fare. In the case of Aldus and Adobe, there is definite product overlap in the high-end drawing package arena, with Adobe Illustrator and Aldus Freehand, and in the photo-retouching market, with Adobe Photoshop and Aldus PhotoStyler. It is likely that two of those four packages will be dropped in the next two years, although it is not clear which. The most likely outcome is that the users of the dropped packages will be offered a low-cost "side-grade" to the one that wins. However, the packages have different interfaces, and the users of the dropped packages will be forced to learn a new program, probably one that they already rejected.

There is little overlap for users in the Novell-WordPerfect purchase, so that won't be as much of an issue. However, Novell and WordPerfect have very different styles of customer support due to their very different products. WordPerfect has gained a reputation for its superb customer support; Novell provides more support through its dealers. Because the companies are located close together, it is likely that Novell will continue to use the current WordPerfect support staff. However, Novell may also choose to cut back the staff if the merged company does not make good profits in the short run. Given Microsoft's great strides in the word processing market, this could seriously hurt the combined company. It is also not clear how Novell will support its new Quattro Pro spreadsheet.

A clear winner in the Novell-WordPerfect merger is Borland. It sold its Quattro Pro line to Novell for $145 million, money that it sorely needs to prop up its ailing database line. Borland has been hurting ever since it bought Ashton-Tate, and it has been so late with new Windows-based dBASE that it lost significant market share. Borland has long been known for its programming tools, and it is expected to more closely link its programming and database tools later this year.

Borland will lay off approximately two thousand people due to its troubles, but it will be in significantly better shape after the sale of Quattro Pro. That sale was for approximately twice Quattro Pro's annual sales, making it a very profitable sale for Borland. With the sale of Quattro Pro, Borland acknowledges that it will probably never be one of the top software companies in terms of sales, but it can still do well in its main markets of database and programming tools.

Of course, in both of those markets, it still has to compete with the mammoth Microsoft. ■

PRICE GUARANTEED
SEE STORE FOR DETAILS
PROTECTION

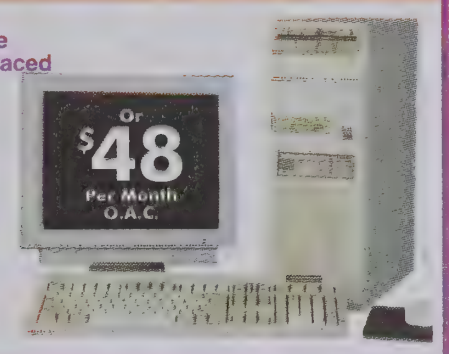
LOWEST PRICES

486DX2-66

8 MB RAM
425 MB (Lightening Fast) Hard Drive
15" SVGA Monitor .28 DP Non-Interlaced

- Local Bus Accelerator Card w / 1 MB
- 3.5" 1.44 MB Floppy Drive
- 9600 Fax \ Modem
- DOS 6.2, Windows 3.1, Works 2.0 For Windows
- 101 Enhanced Keyboard & Mouse

$1799



PENTIUM

586DX-60MHz CPU
8 MB RAM
425 MB (Lightening Fast) Hard Drive

- PCI Graphics Adapter Card w/ 1 MB
- 3.5" 1.44 MB Floppy Drive
- DOS 6.2, Windows 3.1 w/ Manuals
- 101 Enhanced Keyboard & Mouse
- Mid Tower Case
  (Monitor Sold Separately)

$64 Per Month O.A.C.

$2399

MULTI-MEDIA 1

INTEL 486SX-33MHz CPU
4 MB RAM (Expandable 32 MB)
250 MB Hard Drive
14" SVGA Color Monitor

- Double Speed CD-ROM (250 MS)
- Sound Blaster Pro Deluxe
- Labtec Shielded Speakers
- 3.5" 1.44 MB Floppy Drive
- Local Bus Graphics Card w/ 1 MB
- DOS 6.2, Windows 3.1 w/ Manuals
- Includes: US & World Atlas, Chess Master, Mavis Typing Tutor, & Encyclopedia
- 101 Keyboard & 3 Button Mouse

$37 Per Month O.A.C.

$1399

MULTI-MEDIA 2

486DX2-66MHz CPU
4 MB RAM
340 MB Hard Drive
NEC "Triple Speed" CD-ROM

$53 Per Month O.A.C.

- Local BUS Accelerator Card w/ 1 MB
- Pro Audio Spectrum 16 CD Sound Card (16 BIT Sound)
- Labtec CS-550 Speakers
- 3.5" 1.44 MB Floppy Drive
- DOS 6.2, Windows 3.1 w/ Manuals
- US & World Atlas, Chess Master, Mavis Typing Tutor, & Encyclopedia
- 101 Enhanced Keyboard & Mouse
- Mini Tower Case
  (Monitor Sold Separately)

$1899

90 DAYS Interest FREE O.A.C.

HP PRINTERS

HP520	Ink Jet 600x300 DPI	$289
HP560	Ink Jet 600x300 DPI	$579
HPIVP	Lazer Jet 600 DPI/ 4ppm	$949
HPIV	Laser Jet 600 DPI/ 8ppm	$1369

NOTEBOOK

HOT DEAL

486SLC-33

- 4 MB RAM
- 120 MB HD
- DOS 6.2, Win 3.1
- Track Ball
- Carrying Casel

$1299

MULTI-MEDIA KITS

KIT #1

- Double Speed CD-ROM
- Sound Blaster Pro Deluxe
- Shielded Speakers
- Encyclopedia CD
- US & World Atlas Chess Master & Mavis Typing Tutor

$249

KIT #2

- Double Speed CD-ROM
- Sound Blaster Pro Deluxe
- Labtec CS-550 Speakers
- US & World Atlas Chess Master & Mavis Typing Tutor
- Dinosaurs Encyclopedia
- Encyclopedia CD

$399

KIT #3

- Triple Speed CD-ROM
- Pro Audio Spectrum 16 CD Sound Card
- Labtec CS-550 Speakers
- US & World Atlas Chess Master & Mavis Typing Tutor
- Encyclopedia CD
- Plus 4 Other CD Titles!

$599

HOURS:
Mon. to Sat. 9-7pm
Sundays 11-5pm

20/20 Technologies®
1786 Westwood Blvd.
Los Angeles, CA 90024

Prices Subject to Change Without Notice. Prices Good With This Ad Only. All Prices are Cash / Check Discounted.

MASTERCARD VISA DISCOVER AMERICAN EXPRESS

(310) 441-8855

ONE GIGABYTE, 35ms CSC Optical Drive,Only $1295!

HELP! Your original hard drive, that huge 120 MB monster that you thought you'd never fill up, is overflowing! Applications are huge, graphic files swell to enormous sizes and a single color scan can run over 20MB! It seems like the more space you have, the more that you need. While adding hard drives is an option, it gets expensive, and where does it end? Now CSC offers an affordable and expandable alternative to data storage quandaries. CSC optical drives can store up to ONE GIGABYTE on a rugged, removable cartridge! Need more space? Pop in another Cartridge! Cartridges cost about 15¢ per Megabyte of formatted capacity.

And unlike other data archiving methods, these CSC drives perform just like a fast hard drive! Take advantage of this opportunity and order a fully refurbished drive with a full CSC warranty. The CSC Optical MEGATOWER is ready to plug right in and run on your Mac™ system. Kits are available for PCs which include a Megatower enclosure, FastCache™ controller, 1GB rugged, removable optical disk and all the cables you'll need, ready to plug and play for $1595!

CSC OPTICAL TOWERS
NEW DRIVES
T1-1GB EXTERNAL
$1295
T2-1GB EXTERNAL with 4MB CACHE
$1995
CSC 650-650MB EXT.
$795!
CSC QUALITY REFURBISHED OPTICAL DRIVES
T1R-1GB EXTERNAL
$995

SCSI POWER TOWER

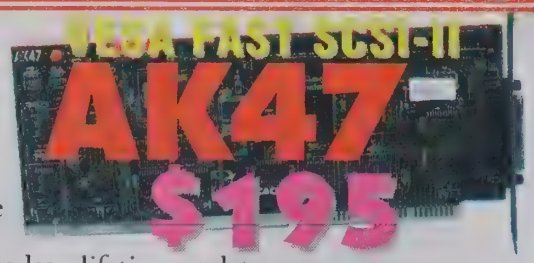
CSC now manufactures the ultimate SCSI enclosure. Up to 8 half height SCSI hard, CD-ROM, optical, or tape drives can be configured to your personal specifications. Full height devices can fit, they take up two bay areas each. The standard power supply is 300 Watts, upgradeable to 900 Watts.

Whether you need an entire network storage subsystem, an external multiple SCSI drive case, or a full-blown disk array, CSC has it! We'll custom build it with the drives of your choice! We also have removable trays in stock for RAID applications.Our Power Tower is made in the USA out of solid steel.

Call our operators today and have CSC custom build a POWER TOWER for you!

CALL (408)734-DISK TODAY

Mainframe disk performance at PC prices! Until now, the performance bottleneck in most high end PC's has been the SCSI controller. Not now - CSC's fast VESA SCSI-II non-caching controller literally outruns almost any SCSI drive, blasting data onto the VESA bus. An on-board FLASH BIOS makes it easy to upgrade your controller as new features become available. Just call our BBS and download the latest SCSI codes - lifetime updates are free. Take advantage of the latest improvements in SCSI without switching to a new controller or changing chips! Run up to seven SCSI devices including hard drives, CD-ROM, WORM, erasable optical, DAT and tape drives from a single board! Call today for more information!



HUGE DRIVES HUGE SAVINGS

You said you wanted BIGGER drives at LOWER prices? Well here they are. These large capacity FAST SCSI-II hard drives are all great deals, so what are you waiting for? At these prices they're bound to fly out the door, so don't wait too long! Call our sales staff today, and have the all the storage space you need!

MAXTOR 1.2GB 8ms.....	$949
HITACHI 1.34GB 13ms....	$995
GD1370 1.37GB 10ms	$1095
IBM 0664 4GB 10ms.....	$3995

15-DAY SATISFACTION GUARANTEE
You won't be needing it, but everything that we sell is backed by our 15 day no questions asked money-back warranty.

Resellers Are Welcome! Call For Quantity Prices

PICK A CARD, ANY CARD AND SAVE BIG BUCKS!

We located a terrific supply of these network boards so you can save big while expanding your system! Whatever network you're using, we have a card for you! Better yet, upgrade that old, slow network today!

NE2100 BUSMASTER....	$49
NE1500 10 BASE T.....	$59
16/4 TOKEN RING.....	$199
VLB BUSMASTER.....	$195

Save even more with quantity discounts! Talk to our technically savvy sales people about your personal network needs today!

We gladly accept Visa/Mastercard, COD or prepaid orders. No surcharge for credit cards.

CORPORATE SYSTEMS CENTER
1294 Hammerwood Ave. Sunnyvale, CA 94089
Tel.(408) 734-DISK
Fax (408) 745-1816

Prices subject to change. Quantities are limited on some items. All trademarks are property of their respective owners.

10,000 DISK DRIVES IN STOCK—CALL FOR A FREE PRICE GUIDE FOR COMPARISON SHOPPING

AVALANCHE OF SELL-ORDERS PUMMELS DOW, LOCAL STOCKS FOLLOW SUIT

For the monthly period ended April 5, the Dow Jones Industrial Average tumbled 156.89 points, or 4.09%, before closing at 3675.41.

Despite favorable economic news, including the highest level of consumer confidence in four years, record corporate profits, moderate inflation, and steady job growth, investors pulled out of the market all month, concentrating instead on rising interest rates.

Sell-orders were ignited by the Federal Open Market Committee, which increased short-term interest rates for the second time in as many months. Increasing interest rates make fixed-income securities more attractive as opposed to stocks.

The MicroTimes Stock Index followed the Dow's plunge, as it fell 203.49 points, or 4%, before ending matters at 4878.26.

Sun Microsystems, Inc., the world's largest maker of computer workstations, fell $7.13 per share, or 24.26%, before closing at $22.25 per share. The company announced that third-quarter revenue will not meet analysts' expectations of $1.4 billion. Analysts at Merrill Lynch & Co., PaineWebber Inc., and S.G. Warburg & Co. all downgraded their rating to "neutral" from "above average," "unattractive" from "above average," and to "add" from "buy," respectively.

Advanced Micro Devices (AMD), Inc. said first-quarter net income jumped 38%, largely due to increased sales of its clone of Intel Corp.'s 486 chips. The company earned $84.6 million, or $0.85 a share, in the first quarter, up from $61.5 million, or $0.63 a share, a year ago. W.J. Sanders III, chairman and chief executive officer of AMD, said, "Improving yields and shorter cycle times enabled AMD to increase unit volumes of Am486 microprocessors more rapidly than expected early in the quarter." AMD shares soared $6.88 per share, to close at $30.25.

Microsoft Corp. was raised to "buy" from "hold" by Hancock Institutional Equity Services analyst Ben Rose. Rose estimates Microsoft to earn $3.70 per share for the year ending June 30, 1994, $4.30 a share in fiscal 1995, and $4.90 a share in fiscal 1996.

In other news, Microsoft signed an agreement with Nippon Telegraph & Telephone to develop multimedia networks in Japan. The companies will work on a software system that will allow users of multimedia networks to gain access to the necessary information. Shares of Microsoft were up $6.75 per share, before closing at $87.75.

Commodore International, Inc., the Pennsylvania-based maker of Amiga computers used in the home entertainment market, announced a second-quarter loss of $8.2 million, or $0.25 a share, compared to a year-earlier loss of $77.2 million, or $2.33 per share. Commodore said it is talking to creditors to seek corporate restructuring. The home entertainment concern closed at $0.75, down $2.50 per share, or 76.92%. ■

EXCH	COMPANY	TICKER SYMBOL	CLOSING PRICE 03/04/94	CLOSING PRICE 04/05/94	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD	P/E RATIO	ANNUAL DIVIDEND RATE	ANNUAL DIVIDEND YIELD	ANNUAL HIGH	ANNUAL LOW
	SOFTWARE										
OTC	Adobe	ADBE	28.25	26.25	-2.00	-7.08	22	0.20	0.76	37.00	16.25
OTC	Aldus	ALDC	23.00	29.00	6.00	26.09	41	0.00	0.00	34.50	13.50
OTC	Autodesk (H)	ACAD	60.00	58.13	-1.88	-3.13	23	0.48	0.83	61.75	37.00
OTC	Borland	BORL	13.38	13.69	0.31	2.34	25	0.00	0.00	27.25	12.00
OTC	Informix	IFMX	23.75	21.00	-2.75	-11.58	25	0.00	0.00	27.25	13.38
OTC	Lotus	LOTS	73.38	72.00	-1.38	-1.87	59	0.00	0.00	86.50	23.50
OTC	Microsoft	MSFT	81.00	87.75	6.75	8.33	26	0.00	0.00	98.00	70.38
OTC	Novell (L)	NOVL	24.25	18.38	-5.88	-24.23	–	0.00	0.00	33.75	16.75
OTC	Oracle	ORCL	34.13	33.31	-0.81	-2.38	41	0.00	0.00	37.75	15.88
OTC	Software Publishing	SPCO	6.63	7.13	0.50	7.55	–	0.00	0.00	9.25	5.50
OTC	Symantec	SYMC	15.00	16.88	1.88	12.50	–	0.00	0.00	20.50	10.88
	HARDWARE										
OTC	Apple	AAPL	36.75	33.50	-3.25	-8.84	–	0.48	1.43	59.13	22.00
OTC	AST Research	ASTA	24.00	21.63	-2.38	-9.90	–	0.00	0.00	33.00	12.75
NYS	Commodore (L)	CBU	3.25	0.75	-2.50	-76.92	–	0.00	0.00	5.00	0.75
NYS	Compaq (H)	CPQ	98.88	100.88	2.00	2.02	19	0.00	0.00	104.88	43.13
NYS	Digital Equipment	DEC	30.88	29.75	-1.13	-3.64	–	0.00	0.00	48.25	27.75
OTC	Dell	DELL	27.25	27.75	0.50	1.83	–	0.00	0.00	34.50	13.50
NYS	Hewlett-Packard	HWP	89.00	82.25	-6.75	-7.58	16	1.00	1.22	93.63	64.38
NYS	IBM	IBM	52.63	53.38	0.75	1.43	–	1.00	1.87	60.00	40.63
NYS	Silicon Graphics (H)	SGI	25.25	23.63	-1.63	-6.44	31	0.00	0.00	26.88	12.88
OTC	Sun Microsystems	SUNW	29.38	22.25	-7.13	-24.26	12	0.00	0.00	32.63	21.13
NYS	Xerox	XRX	97.50	97.50	0.00	0.00	–	3.00	3.08	103.25	69.88
NYS	Tandy	TAN	41.63	36.50	-5.13	-12.31	15	0.60	1.64	50.75	28.13
	CPU'S										
NYS	Advanced Micro Devices	AMD	23.38	30.25	6.88	29.41	12	0.00	0.00	32.88	16.75
OTC	Intel	INTC	69.63	68.75	-0.88	-1.26	13	0.20	0.29	74.50	42.75
NYS	LSI Logic (H)	LSI	21.25	20.50	-0.75	-3.53	19	0.00	0.00	23.00	10.50
NYS	Motorola (H)	MOT	104.75	104.63	-0.13	-0.12	29	0.56	0.54	109.75	68.63
	COMMUNICATIONS										
NYS	AT&T (L)	T	51.38	52.00	0.63	1.22	18	1.32	2.54	65.00	50.13
NYS	BellSouth Corp.	BLS	55.00	57.00	2.00	3.64	27	2.76	4.84	63.88	50.63
OTC	MCI	MCIC	25.63	23.13	-2.50	-9.76	21	0.04	0.17	29.88	22.13
NYS	Northern Telecom	NT	30.63	27.88	-2.75	-8.98	–	0.36	1.29	38.63	21.38
NYS	Pacific Telesis (L)	PAC	31.59	31.38	-0.22	-0.69	–	2.16	6.88	59.25	31.38

KEY: NYS = NEW YORK ASE = AMERICAN OTC = OVER THE COUNTER
(H) = NEW HIGH REACHED IN PERIOD (L) = NEW LOW REACHED IN PERIOD

MARKET DIARY:

ADVANCES	11
DECLINES	20
UNCHANGED	1
NEW HIGHS	5
NEW LOWS	4

MOST ACTIVE ISSUES:

LARGEST DOLLAR GAINER	Advanced Micro Devices	$ 6.88
LARGEST DOLLAR LOSER	Sun Microsystems	$ -7.13
LARGEST PERCENTAGE GAINER	Advanced Micro Devices	29.41 %
LARGEST PERCENTAGE LOSER	Commodore	-76.92 %

	CLOSE 03/04/94	CLOSE 04/05/94	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD
MICROTIMES STOCK INDEX	5081.75	4878.26	-203.49	-4.00
DOW JONES INDUSTRIAL AVERAGE	3832.30	3675.41	-156.89	-4.09
STANDARD & POOR'S 500 INDEX	464.74	448.29	-16.45	-3.54
N.Y.S.E. COMPOSITE	257.70	248.41	-9.29	-3.60
NASDAQ COMPOSITE	790.55	750.95	-39.60	-5.01

CLOSING QUOTES FOR GRAPH:

DATE	MICRO TIMES	DOW JONES
08/23/93	4264.70	3605.98
09/17/93	4212.67	3613.25
10/18/93	4473.13	3642.31
12/17/93	4644.25	3751.57
01/07/94	4866.50	3820.77
02/04/94	4728.74	3871.42
03/04/94	5081.75	3832.30
04/05/94	4878.26	3675.41

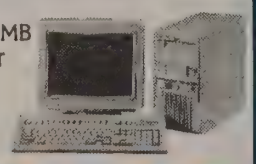
Copyright Nordby International, Inc. Louisville, CO

This information is based on sources believed to be reliable, and while extensive efforts are made to assure its accuracy, no guarantees can be made. Nordby International and Microtimes assume no liability for any inaccuracies. For information on Nordby International's Data-On-Demand Services for any of the above companies call Nordby International at (800) 926-7404.

AUTHORIZED DEALER FOR: ViewSonic® MITAC MICROTEK Canon EPSON HEWLETT PACKARD COMPAQ Novell Authorized Reseller Panasonic Office Automation CTX CBM Bondwell®

CBM VESA 486-DX

- Pentium (P24T) Overdrive Ready
- 256K Cache AMI BIOS
- 4MB RAM up to 32MB
- 255MB IDE HD
- 1.2MB and 1.44MB Floppy Drives
- 14" SVGA 1024 X 768 NI .28DPI (Full Screen)
- 101 Keyboard
- VESA Local Bus SVGA w/1MB
- VESA IDE FD/HD Controller
- 1 Year Parts and Labor Warranty



486DX-33 .... $1199
486DX2-66... $1399

CBM PENTIUM/PCI/CAD STATION

NEW! NEW!

- 60MHz Intel Pentium Processor
- 3 PCI Slots 4 ISA Slots
- 8MB RAM up to 128MB
- 1.2 & 1.44 Floppy Drives
- 540MB IDE HD
- SMC 37C665 Fast Integrated Super IDE Controller with I/O
- Diamond Viper PCI w/2MB
- 15" Full Screen .28DPI 1280 x 1024 NI 72Hz Monitor
- 101 Enhanced Keyboard
- 3 Button Mouse

$2895

CBM VESA 486DX2-66 SCSI 2 MULTIMEDIA STATION

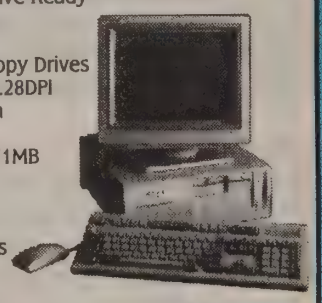
- P24T Upgradable
- 256K Cache AMI BIOS
- 8MB RAM up to 32MB
- 1.2 & 1.44 Floppy Drives
- 540MB SCSI-2 HD
- Sound Blaster SCSI-2 ASP 16 Bit Sound Card
- Double Speed SCSI-2 CD-ROM
- 15" 1280 x 1024 NI Monitor
- 101 Keyboard
- 3 Button Mouse
- Diamond Stealth 24 Bit VLB True Color
- 1 Year Parts and Labor Warranty
- Adaptec 35 AHA 2842 VL Master Fast SCSI-2 Controller

$2999

CALL FOR PCI SCSI OPTIONS TO 2.1GB! CUSTOM CONFIGURATIONS AVAILABLE!

Canon VESA LOCAL BUS SYSTEM

- Pentium (P24T) Overdrive Ready
- 4MB RAM up to 68MB
- 340MB HD
- 1.2MB and 1.44MB Floppy Drives
- Canon 14" SVGA 1024 .28DPI
- 9600 Fax/2400 Modem
- 101 Keyboard
- VESA LB SVGA Card w/1MB
- Bundled Software
  MS DOS 6.2
  MS Windows 3.1
  MS Works for Windows
  Microfax
- 1 Year On-Site Service



486SX-33 ..... $1490
486DX2-50 ..... $1695
486DX2-66 ..... $1850

CBM PENTIUM/PCI/EISA NETWORK SERVER

- Full Tower Chassis w/300W UL Power Supply
- PCI/EISA/Pentium Motherboard
- Intel 60MHz Pentium CPU
- Intel Mercury PCI Chipset
- 1.44MB Floppy Drive
- EISA Fast SCSI Controller
- Micropolis 1.75GB Fast SCSI-2 Hard Drive MC 2217S
- 101 Keyboard
- 15" SVGA 1280 x 1024 NI 72Hz .28 Flat
- Diamond Viper PCI Video w/2MB
- 3 Button Mouse
- System Software Not Incl.
- 1 Year Warranty Parts and Labor

$5249

COMPAQ 486DX2-66MHz

- Intel 486DX2-66MHz
- 4MB RAM up to 32MB
- 340MB IDE Hard Disk
- 1.2 & 1.44MB Floppy Drives
- 9600 Fax/2400 Modem
- Compaq Mouse
- Compaq 101 Keyboard
- MS DOS Windows 3.1 Professional Write
- 3 Year Warranty
- 1 Year On-Site Service

$2150

PRINTERS

INKJET PRINTERS

Canon BJ-200e	$285
Canon BJC-600 Color	$585
Canon BJ-10SX Portable	$245
Epson Stylus 800	$275
Epson Stylus 300	$224
HP DeskJet 560C	$545
HP DeskJet 500C	$375
HP DeskJet 310	$295
HP DeskJet 520	$290
HP 1200C	$1395

LASER PRINTERS

HP 4SI MX	$4150
HP 4SI	$2830
HP 4M	$1799
HP 4	$1385
HP 4MP	$1325
HP 4P	$945
HP 4ML	$1035
HP 4L	$635
Epson Action 1500	$655
Canon LBP-430	$585

DOT MATRIX PRINTERS

Epson LQ 570+	$245
Epson LQ 1070+	$385
Epson LQ 1170	$615

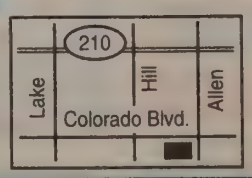
SOUND/VIDEO CARDS

ATI VLB Ultra Pro 2MB	$395
Diamond Viper VLB 2MB	$365
Diamond PCI Viper 2MB	$435
Diamond Stealth 24 VLB	$160
Orchid Fahrenheit VLB 1MB	$195
Orchid Fahrenheit ISA 1MB	$160
Sound Blaster 16	$135
Sound Blaster 16 SCSI II ASP	$215
Pro Audio Spectrum 16	$115
NEC 3X1 CD (Triple)	$425
NEC 84 (Double Spin)	$295

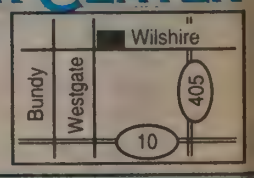
2 LOCATIONS TO SERVE YOU BETTER

PASADENA COMPUTER CENTER
PASADENA
1756 E. Colorado Blvd. · Pasadena, CA 91106
TEL: (818) 568-1088
FAX: (818) 568-9132
Hours: Mon.-Fri. 9:00-6:00, Sat. 10:00-6:00

(2 Blocks East of Pasadena City College)



PASADENA COMPUTER CENTER
WEST LOS ANGELES
11841 Wilshire Blvd. · Los Angeles, CA 90025
TEL: (310) 575-4028
FAX: (310) 575-3831
Hours: Mon.-Fri. 9:00-6:00, Sat. 10:00-6:00



NOTEBOOK SPECIALS

LEASING PROGRAM AVAILABLE
90 DAYS SAME AS CASH
ASK YOUR SALES REPRESENTATIVE FOR DETAILS.

Canon NOTEJET WITH BUILT-IN BUBBLEJET PRINTER

TOP RATED!

- 486SLC-25MHz
- 4MB RAM up to 12MB
- PCMCIA II Slot
- Automatic Sheet Feeder
- Built-in Canon Bubble Jet Printer (300DPI)
- Canon Hand Held Trackball
- Bundled Software: MS DOS 6.0 MS Windows 3.1
- 1 Year Factory Warranty

80 HD/$2195
185 HD/$2595
COLOR NOTEJET 486C $2895

HEWLETT PACKARD HP OMNIBOOK 430

- 4MB RAM
- 40/105MB HD
- PCMCIA Type II Slot
- Monochrome

40 HD/$1099
105 HD/$1295

EPSON® ACTION NOTE 486SLC-33

SPECIAL! NEW!

- 4MB RAM up to 8MB
- 9600 Fax/2400 Modem
- Logitech Trackball
- 170MB HD
- 1.44MB Floppy
- Carrying Bag
- 1 Year On-Site Service
- Bundled Software: MS DOS 6.0 MS Windows 3.1 WinFax

$1495

Canon INNOVA 486NX

- 486SX-25MHZ
- 4MB RAM up to 12MB
- 120MB Hard Disk
- 9600 Fax/2400 Modem
- Built-in Trackball
- DOS 6.0/Windows 3.1
- Monochrome
- Works for Windows

$1495

MITAC COLOR NOTEBOOK

- 486SX-33MHz Intel
- 4MB up to 8MB
- 200MB Hard Disk
- 1.44MB Floppy Drive
- Built-in Trackball
- System Pre-loaded MS DOS & Windows 3.1

200MB HD/$1895

EPSON® ACTION 4000 SUBNOTEBOOK

3.85 LBS!

- 486SLC-33MHz
- Only 3.85 Lbs.
- PCMCIA Slot
- 4MB up to 8MB
- 120MB Hard Disk
- 1.44MB Floppy Drive
- Built-in Trackball
- MS DOS, Windows 3.1 & WinFax
- 1 Year On-Site Service

$1399

MITAC MULTIMEDIA SUBNOTEBOOK

4 LBS.!

- Intel 486SX-25MHz
- Built-in Multimedia Sound Card
- Speaker
- Only 4Lbs.
- PCMCIA Type II
- 4MB up to 20 MB
- Removable 120MB Hard Drive
- 1.44 Floppy Drive
- Built-in Trackball
- Pre-installed MS DOS & Windows 3.1

$1399 (AFTER $100 REBATE)

Bondwell® 486SLC-33MHz

- 4MB RAM up to 8MB
- 120MB Hard Disk
- Fax/Modem
- Carrying Case
- DOS 6.0

$1295

EPSON® ACTION NOTE 500C COLOR NOTEBOOK

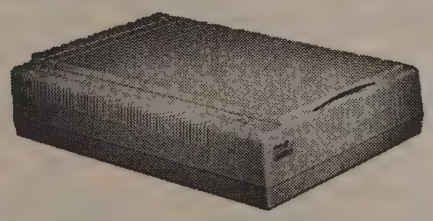
- 486SLC2-50MHz
- Passive Color Screen
- 4MB RAM up to 8MB
- 120 MB Hard Disk
- Fax/Modem
- Carrying Case
- DOS, Windows 3.1 & WinFax
- 1 Year On-site Service

$1999

MICROTEK SCANMAKER® IIG

NEW!

- 256 Grayscale Flat Bed Scanner
- Caere Software Bundled



$549

UPGRADE YOUR SYSTEM!

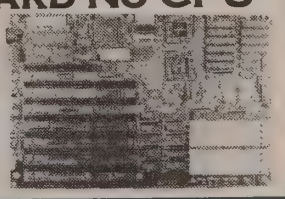
PCI/ISA INTEL PENTIUM 60MHz

- Motherboard
- Intel Pentium 60MHz CPU

$1195

486DX VLB MOTHERBOARD NO CPU

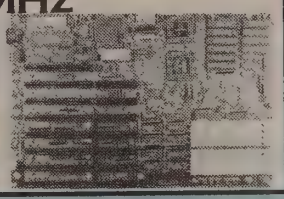
- 256K Cache
- AMI BIOS



$99

PCI/EISA PENTIUM 60MHz

- Motherboard
- Intel Pentium 60MHz CPU



$1295

420MB IDE HARD DRIVE

$299

SERVICES AVAILABLE FOR IBM COMPATIBLE PRODUCTS:

- Memory Upgrades
- Installations:
  - Multimedia
  - Hard Drives for both SCSI and IDE
  - Fax/Modem
- Reasonable Rates

ALL PRICES AND PRODUCTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.
Corporate, Education and Government P.O.'s Welcome! Prices Quoted Reflect 3% Cash Discount

Seeking *Universal* Computer-Assisted Political Power

BY JIM WARREN

We now have global online access to comprehensive state legislative information, free of state charges or use restrictions, and other records may soon become similarly available (see sidebar). But "only" 850,000 to 1.5 million or more of California's thirty-one million population currently use the Internet—at least until the rest of 'em park their gasoline horses and start fume-free electronic commuting.

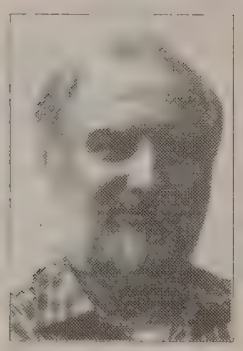
So how can all those other folks be kept apprised of what Sacramento's about to do to 'em? Here's a business and civic-service opportunity:

CIVIC FAX SERVICES

Set up a customized fax service that automatically scans all legislative information, daily, for words and phrases that clients specify as being of interest. When it gets a "hit," have it automatically fax-modem a copy of the goodies to all clients known or believed to be interested in the issue. These can be fee or free clients—community leaders, political irritants, reporters, concerned local agencies, about-to-be-gored businesses and labor groups, and so on.

REALIZABLE FANTASIES

This idea was prompted by email from someone identified only as "aflgeorge."



Copyright © 1994 by Jim Warren; email/jwarren@well.sf.ca.us; 345 Swett Rd., Woodside, CA 94062. Permission herewith granted to copy-in-full for any nonprofit use.

TOLL-FREE GLOBAL FAXING

To offer more access at less cost, set up a network of computers strategically located around the state—or world—that are connected to the Internet and also equipped with fax-modems. These can be tiny, relatively dumb machines that do no more than receive text and faxing instructions, transmit the faxes as instructed, and return a message verifying transmission results (fax number, date, time, message, success or failure).

These already exist here and there—the start of net-based bypasses around phone monopolies' golden toll-booths. This uses the functionally free Internet to transport messages from the originator's computer to some cooperating machine within local dial-up distance of the destination fax unit.

Sadly, some of the implementations have a user interface that's even worse than DOS or UNIX, requiring the email address to be the fax-number digits in reverse order, separated by periods. Vista points on the information highway that clearly need beautification.

A *humane* design would be to "address" the email fax to the full phone number at a generic fax site, e.g., *country-area-number@faxsite.net* . Hyphens or periods in the fax number should be optional but acceptable—since customs differ from nation to nation. No doubt the builders of network message-routers will *love* this idea. (The principle is to make computers convenient for people, not vice-versa.)

And the fax message, when sent, should allow the fax header-line that is normally generated by the sending fax machine to be specified by the original sender—probably the "Subject" line of the email message.

VOICE-MAIL VARIATION

Noting that the fax fantasy can be used for anything, let's return to the more narrow issue of computer-assisted political power. Net-based faxing still doesn't give universal access, since most folks don't have fax machines. So how to serve those handicapped citizens who are both modem- and fax-impaired?

Use an auto-dialer and a voice-synthesis unit, connected to the net like the strategically located fax modems. Have it automatically send entirely automated, limited messages and alerts to interested clients who request such notifications—e.g., "saying" the bill number of legislation that has been introduced or amended that concerns specified topics of interest, or perhaps telling the dates and times when hearings are scheduled for the topic(s), and giving a voice-phone number to call for more information.

LET FOLKS HAVE FED FEC FILES

More on computer-assisted voters' access to important political information:

The Federal Elections Commission (FEC) receives campaign disclosures and other filings by federal elected officials in paper form. They key-enter and key-verify some summary information, in-house, then ship the forms to a contractor in Virginia to have all of the information keyboarded—perfectly and totally error-free, of course—into a computer format, which is then shipped back to the FEC.

The wasteful costs of this process justify the FEC charging $20 per connect-time-hour for online computer access to their computerized public records—access for those who are wealthy enough and involved enough to afford the price of finding out who paid how much for whom. The data is also available on magtape—for a healthy fee, of course.

Mere citizens and low-caste voters who can't or don't want to pay premium fees for modern access can get turgid mounds of pre-landfill copies—eventually—for a copying fee. Or for free, they can look at the paper records—in the FEC's office in the Center of the Known Universe (Washington, DC). Paper copies for elected federal representatives are also eventually available in the state secretary of state's office (in the state capitol) and/or usually at one or two of the county clerks or registrars of voters offices in the representatives' district.

DON'T PAY RETAIL!!

90 DAYS SAME AS CASH!! LIFETIME LABOR WARRANTY!

486/50 DX2
(VESA LOCAL BUS)

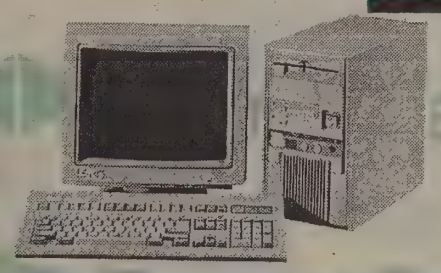
OVER DRIVE SOCKET FOR PENTIUM
256K EXTERNAL CACHE
4MB RAM
1.44MB FLOPPY DRIVE
VESA LOCAL BUS IDE CONTROLLER
210MB HARDDISK DRIVE
MINI TOWER CASE
SVGA VIDEO CARD (1024X768)
SVGA MONITOR (1024X768)
101 ENHANCED KEYBOARD
3 BUTTON HI-RE MOUSE
1 YEAR PARTS WARRANTY
LIFE TIME LABOR WARRANTY
72 HOURS BURN-IN TEST

$1049

MULTIMEDIA SPECIALS!!!

DISCOVERY 16 CD
PANASONIC DOUBLE SPEED CD ROM
SOUND BLASTER 16
5 TITLES PACK (INCLUDING ENCYCLOPEDIA)
AUDIO CABLE, DATA CABLE, SPEAKER PAIR

$339



486/66MHz SPECIAL
(MULTI MEDIA VESA SYSTEM)

PANASONIC DOUBLE SPEED CD-ROM 33A
SOUND BLASTER 16
5 TITLES (INCLUDING ENCYCLOPEDIA)
AUDIO CABLE, DATA CABLE, SPEAKER PAIR
IBM 486/66 MHz M/B (VESA)
256K EXTERNAL CACHE
4MB RAM
VESA LOCAL BUS IDE CONTROLLER
340MB HARDDISK DRIVE
MINI TOWER CASE
1.44MB F.D.D.
LOCAL BUS VIDEO CARD W/1M
SVGA MONITOR (0.28MM)
101 ENHANCED KEYBOARD
3 BUTTON MOUSE
1 YEAR PARTS WARRANTY
LIFETIME LABOR WARRANTY
72 HOURS BURN-IN TEST

FREE MOUSE with this ad for any complete system

$1499

UNBEATABLE PRICES FOR QUALITY COMPUTERS!!!!!

386DX/40MHz (64K Cache) **$225**	**486SX/25MHz** (64K Cache) **$275**	**486DX2/50MHz** (256K Cache) **$475**	**486DX/50MHz** (256K Cache) **$575**
486DX/33MHz (256K Cache) **$465**	**486DX/40MHz** (256K Cache) **$465**	**486DX2/66MHz** (256K Cache) **$645**	**486DX2/66MHz** (LOCAL BUS\256K Cache) **$665**

SYSTEM KIT INCLUDES

- Mini Tower
- 200 W Power Supply
- 1MB RAM
- 1.44MB Floppy Disk Drive
- Super I/O & IDE Card
- 2 Serial/ 1 Parallel/ 1 Game Port
- Real Time Clocks & Calendar
- 101 Enhanced Keyboard
- 1 Year Parts & Life Time Labor Warranty
- 72 Hours Burning Test

RAM UPGRADE

1M to 2M	Call
2M to 4M	Call
1M to 4M	Call
1M to 8M	Call
4M SIMM	Call
16M SIMM	Call
Fax Modem (9600/2400) W/Window Software	$39
Fax Modem (14400/14400) W/Window Software	$119
250MB Backup Drive	$149

NETWORKS

• Netware V3.12 5 USERS	$659
• Netware V3.12 10 USERS	$1299
• Netware V4.0 5 USERS	$899
• Netware V4.0 10 USERS	$1999
• Netware V4.0 25 USERS	$2999
ETHERNET 16BIT (NE2000) Card	$39

MONITORS

Mono VGA 14"	$109
SVGA 14" (0.39mm)	$195
SVGA 14" (0.28mm)	$225
SVGA 14" (0.28mm NI)	$245
SVGA 15" (0.28mm NI)	$359
SVGA 17" (0.31mm NI)	$619

HARD DISKS

170MB IDE	$185
210MB IDE	$205
250MB IDE	$215
340MB IDE	$265
420MB IDE	$305
540MB IDE	$395
1.2 GB	Call
1.5 GB	Call

PRINTERS

SAMSUNG 24PIN	$159
HP 520	$299
HP 550C	$499
Okidata 400E	$499

NOTEBOOK

INEX MODEL 4150
486/50MHz
4MB RAM
120MB HD
DOS 6.2
1 Year Warranty

$1359

CompuTek Hot Order 1-800-700-COMP

VISA MasterCard DISCOVER AMERICAN EXPRESS

1 Year Free Interest • Corporate Accounts Welcome

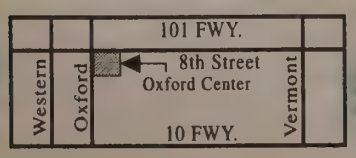
LOS ANGELES
3548 1/2 W. 8th St.,
Los Angeles, CA 90005
TEL. (213) 383-9900
FAX (213) 385-1621

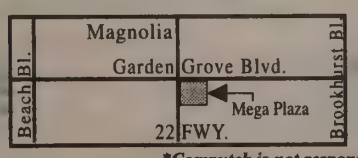
GARDEN GROVE
9042 Garden Grove Blvd. #100
Garden Grove, CA 92644
TEL. (714) 741-9494
FAX (714) 741-9498

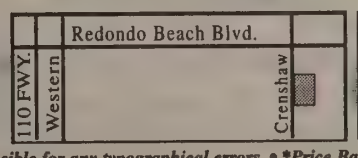
SOUTH BAY
15900 Crenshaw Blvd. #F
Gardena, CA 90249
TEL. (310) 380-6677
FAX (310) 380-6678

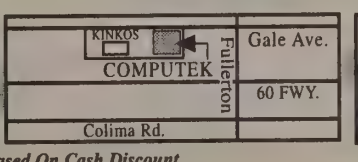
CITY OF INDUSTRY
18230 Gale Ave.
City of Industry, CA 91748
TEL. (818) 965-7477
FAX (818) 965-7077

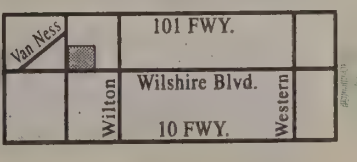
TRAINING CENTER
4009 Wilshire Blvd. 2nd Flr.
Los Angeles, CA 90010
TEL. (213) 381-5431
FAX (213) 385-1621











*Computek is not responsible for any typographical errors. • *Price Based On Cash Discount.*

PRICED TO FLY!

Notebook and sub-notebook computers ready for immediate purchase

LIMITED QUANTITIES IN STOCK

CALL NOW!!

FREE Leatherette Carrying Case Suggested retail price $39.99

Order within the next 30 days & receive a FREE Leatherette Carrying Case with your purchase

486 SLC 33MHz 2MB RAM/120MB **$1299**

486 DX 33MHz 4MB RAM/200MB **$1699**

486 DX2 66MHz 4MB RAM/200MB **$1799**

– Simultaneous displays
– 84-key keyboard

Color 486 DX
33MHz
4MB RAM
200MB

$2999

– Active Matrix
– NIMH Battery
– Black Chassis

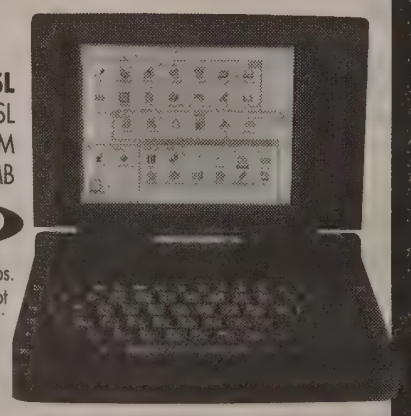
All machines bundled with Microsoft® Windows®

intel inside

Traveler SL
486 SL
4MB RAM
120MB

$1599

– Feather-light 3.9 lbs.
– PCMCIA typeII slot
– Trackball
– Includes external 3.5" floppy disk drive



ALSO AVAILABLE
RAM Modules • Fax/Modems
Carrying Cases
for Altima, Compudyne & Twinhead products

NOT ALL MODELS OR PRICES LISTED – CALL FOR MORE DETAILS.

800-356-9990
or **510-356-5600**

altima
Altima Systems, Inc., 1390 Willow Pass Rd.
Suite 200, Concord, CA 94520
©1994 Altima Systems. ALL RIGHTS RESERVED.

STORE MANAGEMENT SOFTWARE

STANDARD PACKAGE FEATURES:
Designed for today's store business operations including Inventory Control, Purchase Order, Invoicing, Accounts Receivables, Accounts Payable, Customer/Vendor Handling & Reports.

SINGLE USER *** NOW $99 (REGULARLY $199)
MULTI USER *** NOW $199 (REGULARLY $399)

CUSTOMIZED PACKAGE AVAILABLE:
To have your store software do what you have been doing manually, please call for a FREE CONSULTATION! Quick and easy to set up and use. GUARANTEED TO FIT YOUR NEEDS!!!

CALL NOW FOR YOUR FREE DEMO DISK!

VL-BUS SYSTEM

486DX/33MHz $1285
486DX2/66MHz $1435

- **Intel** CPU w/ Cooling Fan
- 4 MB RAM (max 32MB) 256K Fast Cache
- Pentium OverDrive Ready
- 245MB Fast IDE Hard Drive
- 1.2MB + 1.44MB **Teac** Floppy Drive
- 32 Bit VL **Genoa** SVGA Card 1 MB (max 2 MB) Accelerator
- 32 Bit VL IDE HDD, FDD, 2S, 1P, 1G
- 14" SVGA Monitor (1024 x 768, .28)
- Tower Case w/ 200W UL P/S
- 101 Key Enhanced Keyboard
- FREE Mouse

PEAKTRON COMPUTER, INC.

CALL FOR OTHER SYSTEM CONFIGURATIONS AND ACCESSORY PRICES!
**TEL. (714)893-6224 • FAX (714)893-6764 • 5771 Westminster Blvd., Westminster, CA 92683
* All prices reflect cash discount. * Price & Specifications subject to change w/out notice. * Tradenames are properties of their respective owners. *

NEWS & VIEWS

FEC records are already computerized. Copies-on-pulp are already filed with state and local filing agencies. So let's have the FEC offer at least those local agencies free, timely, online access via the *nonproprietary* Internet to its *computerized* files.

Then those service-oriented local agencies can, in turn, cascade timely data out to the folks who most need it and are most affected by it—the voters—in print and electronic form. Distribution via library computers, civic networks, K-12 schools, colleges and universities, computer-equipped community organizations, voter-employing businesses, and so on.

O' course, the FEC *could* make all of the information available directly to fifteen to twenty-five million net-connected citizens via the public nets—like the 1993 Office of Management and Budget's Circular A-130 *mandated* for most federal agencies.

How to make this happen: Fax or write your Congress creatures (representative, senators), asking that they immediately introduce legislation permitting and requiring the FEC to offer all states' secretaries of state and all counties' clerks and voter registrars

(1) online access to all computerized Federal Elections Commission public records,

(2) without charge by the FEC or by any other federal agency,

(3) access that is as timely as any other online access that the FEC provides, and

(4) without restriction on further free dissemination of the data, by the state and local agencies receiving it.

Notice this says "all" of the files, not just those pertaining to the local or state agency's jurisdiction. Why? Because everyone is impacted by the votes of all federal representatives. Why else do some representatives and senators receive as much as 80–90% of their campaign loot from outside of their districts? (This is also the constitutional rationale for not prohibiting such out-of-district patronage purchases.)

Be sure to ask your "representatives" what, explicitly, they will do on this matter. Say you will widely distribute their (non)responses across their district—to your associates, community groups, political reporters, newspaper editors, online forums, etc. And do so.

Send copies of your request to local political reporters. Send separate, brief letters-to-the-editor to local newspapers describing your request. (Less-than-wealthy newspapers would *love* to have better access to political disclosures.)

continued on page 142

WE'LL BEAT ANY SYSTEMS PRICES

in this magazine

LOW LOW PRICES WITH HIGH QUALITY!!

Economy System

- Mini-Tower Case
- 1MB RAM
- 210MB Hard Disk (400MB w/Double Space)
- IDE/I/O Controller
- 1.44MB Floppy Drive
- VGA Graphic Card
- 14" VGA Monitor
- 101 Enhanced Keyboard
- Liftetime Labor Warranty
- 1 Year Warranty
- 72-Hour Burn-In Test

386DX-40MHz	$579
486DLC-40MHz	$615
486SX-33MHz	$729
486DX-33MHz	$815

This Month's Special!

Vesa Local Bus System

- Mini-Tower Case
- 4MB RAM
- 210MB Hard Disk (400MB w/Double Space)
- VESA IDE/I/O Controller
- 1.2 & 1.44MB Floppy Drives
- 1MB VESA SVGA Card
- 14" SVGA Non-Interlaced Monitor
- 101 Enhanced Keyboard
- Lifetime Labor Warranty
- 1 Year Warranty Parts
- 72 Hour Burn-In Test

486DX-33MHz	$1015
486DX-40MHz	$1099
486DX2-66MHz	$1245
486SLC2-66MHz	$1099

FREE MOUSE W/COMPLETE SYSTEM PURCHASE!

386SX-40MHz $195	486SX-33MHz $310	486DX-33MHz/256K $405
386DX-40MHz/128K $220	486DX-40MHz/256K $435	486DX2-50MHz/256K $440
486DLC-40MHz/128K $255	486SLC2-66MHz IBM w/Math-Co $425	486DX2-66MHz/256K $595

Systems Include:

- Mini Tower Case
- 1MB RAM
- 1.44MB Floppy Drive
- IDE/I/O Controller
- 2 Serial/1 Parallel/1 Game Port
- 101 Enhanced Keyboard
- Lifetime Labor Warranty
- 1 Year Warranty Parts
- 72-Hour Burn-in Test

Monitor & Graphic Cards

14" Mono Monitor	$79
14" Mono VGA w/Card	$125
SVGA 14" (.39)	$175
SVGA 14" (.28) Non-Interlaced	$230
SVGA 15" (.28) Non-Interlaced	$295
SVGA 17" Non-Interlaced	$575

Modem & Parts

Mouse	$8
Joy Stick	$15
2400 Modem	$28
Sony CD ROM	$165
FAX MODEM (9600 BAUD)	$36
250 Tape Drive	$159
250 Tape	$19
14400 FAX/DATA MODEM	$99
Epson ES-600 Color Scanner	$795
Winjet 1200 (1200dpi for HPLP)	$595

Pentium PCI $2395

- Full Tower Case
- 8MB RAM
- 540MB HARD DISK DRIVE
- 1.2 & 1.44 Floppy Drive
- 32 Bit IDE/IO
- 32 Bit 1M SVGA Card (Diamond)
- 15" Non-Interlaced SVGA Monitor
- 101 Keyboard

Upgrades

Memory Upgrade Prices	CALL
1.2M FDD	$44
1.44M FDD	$37

Hard Disk Drives

170MB IDE	$175
210MB IDE	$185
250MB IDE	$205
340MB IDE	$255
420MB IDE	$295
540 MB IDE	$395
1.0 GIG SCSI	$745

486-66MHz Multimedia System $1545

- Mini Tower Case
- 486-66 IBM this month special configuration
- Sony Double Speed CD-ROM
- 16 Bit Sound Card
- 5 CD Titles
- Speakers

Multi-Media Kit $275

- Sony Double Speed CD-ROM (• CDU-33ft)
- Sound Midas 16 Pro (SB Compatible)
- 6 CD Titles

Need A Pager? $6.99/mo

Motorola Pager Sale!

- 900MHz Brand New Unit
- Low Monthly Air Time
- Powerful 1200 Bravo Beeper
- Local & Statewide Coverage

Notebook Clearance Sale Limited Quantity!

Hyundai Neuron 433SLC $1295

- 486SLC - 33MHz
- 120MB HDD
- 4MB RAM
- Trackball Built-In
- DOS 6.0 Windows 3.1
- 18 Month Warranty
- Carrying Case
- PC Ready

Hyundai Courier 386SXL-25 MHz $945

- 2MB RAM
- 120MB Hard Drive
- Trackball Built-In
- PCMCIA
- Windows & DOS
- Carrying Case
- 18 Mo. Warranty

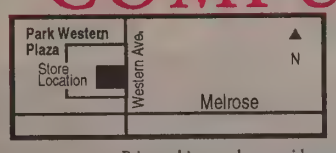
Bondwell 386SL-25MHz $925

- 2MB RAM
- 80MB HARD DRIVE
- 1.44 Floppy Drive

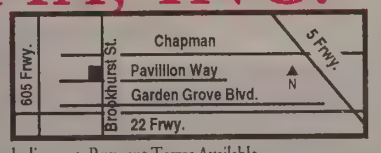
BUY TODAY DON'T PAY UNTIL TOMOROW! 90 DAYS SAME AS CASH! FINANCING AVAILABLE!

COMPUTOPIA, INC.

901 N. Western Ave.
Suite 2
Los Angeles, CA 90029
(213) 467-4646
Fax (213) 467-4600



DBA C&C
Business Hours:
Mon.-Fri.
9:30 am-6:30 pm
Sat.
10 am - 6 pm



12093 S. Brookhurst St.
Suite D
Garden Grove, CA 92640
(714) 530-2200
Fax (714) 530-5500

Prices subject to change without notice. Prices based on cash discount. Payment Terms Available.

WE CONFIGURE

SB CD 16

Sound Blaster Pro 16
Panasonic Double speed
CD-ROM Drive
Pair of Speakers
US Atlas
World Atlas
Chess Master 3000

$399

Discovery CD 16

SoundBlaster Pro 16
Panasonic Double Speed
CD-ROM Drive
Pair of Boosted Speakers
Aldus Photostyler SE
MultiMedia Encyclopedia
The Animals
Just Grandma & Me
Where in the world is
Carmen San Diego?

$445

Pentium - 66

256K Cache Pentium M.B.
PCI Local Bus
8MB RAM
340MB IDE Hard Drive
1.2 & 1.44 Floppy Drive
PCI IDE Controller
PCI Diamond Viper w/2MB VRAM
15" CTX Non-Int. .28 Monitor
Keytronic 101 Enh. Keyboard
Full Tower Case

$2995

Connor 250MB Tape Back Up
$140

This Month's SPECIAL

486, 33MHz VESA
8MB RAM, 256k Cache
250MB IDE Hard Drive
Teac 1.2 & 1.44 Floppy Drive
14"SVGA .28DP Non-Int. Monitor
32 Bit Win. Ace. 1MB SVGA Card
32 Bit IDE Controller
101 Enhanced keyboard
Mini-Tower Case

Reg.$1329 Cash **$1145**

PCI BUS

Intel 486DX-33 CPU
8MB RAM, 256k Cache
340MB IDE Hard Drive
Teac 1.2 & 1.44 F Drive
14" SVGA .28DP Non-Int. Monitor
PCI Bus Diamond Viper w/2MB •VRAM
101 Enhanced Keyboard
Mid-Tower Case

Reg.$2095 Cash **$1995**

All systems include a mouse!

Happy Customer List

Department of Water & Power
L.A. Police Department
U.C.L.A.
U.S.C.
Xerox
Improv
Toshiba
KCBS
KTLA
Metro
Hard Rock Cafe
RAMPAGE
Improv Driving School
Samy's Camera

YOUR WAY

CALL FOR THE BEST PRICE, BEST DEAL, BEST SERVICE

VESA LOCAL BUS

System Includes

Intel 486 CPU, 4MB RAM, 256K Cache
250MB Fast IDE Hard Drive
Teac 1.2MB, 5.25" Floppy Drive
Teac 1.44Mb, 3.5" Floppy Drive
14" Super VGA Monitor,
.28 DPI Non-Interlaced (1024x768)
32 Bit VESA Windows Accelerated 1MB
Super VGA Adaper, 1.6M Colors,
101 Enhanced Keyboard
Mini-Tower Case
(*8MB Upgrade $75)

	Reg.	Cash
486sx-25MHz	$1145	$1045
486sx-33MHz	$1245	$1145
486dx-33MHz	$1295	$1195
486dx2-66Mhz	$1495	$1395

ECONO SYSTEM

System Includes

4MB RAM, 128K Cache
210MB Fast IDE Hard Drive
Teac 1.2MB, 5.25" Floppy Drive
Teac 1.44MB, 3.5" Floppy Drive
14" Super VGA Monitor (1024x768)
Trident Super VGA Display Adapter
Spill Resistant 101 Enhanced Keyboard
Mini Tower Case

	Reg.	Cash
386sx 40MHz w/2MB	$745	$695
386dx 40MHz	$845	$795
486sx 25MHz	$925	$895
486sx 40MHz	$1145	$1095

WE CONFIGURE YOUR WAY

Multi Media PC

System Includes

Specially Designed MPC Case w/speakers
Sound Blaster Pro 16 (16 Bit Stereo Sound)
Panasonic Dual Speed CD-ROM Drive
4 Title CD Software
Include Parts List from VESA Local Bus System

	Reg.	Cash
486sx 33 MHz	$1595	$1495
486dx 33MHz	$1675	$1575
486dx2 66MHz	$1775	$1775

Life Time Labor Warranty
1 Year Parts Warranty

Free access to BBS (310) 869-1337

EISA/VESA BUS

System Includes

Intel 486 EISA/VESA Mother Board
8MB RAM, 256K Cache
210MB Fast IDE Hard Drive
Teac 1.2MB, 5.25" Floppy Drive
Teac 1.44MB, 3.5" Floppy Drive
14" Super VGA Monitor, .28 DPI Non-Interlaced (1024x768)
32 Bit VESA Windows Accelerated 1MB
Super VGA Adapter, 1.6M Colors
Special 32 Bit EISA IDE Hard Disk Cont.
101 Enhanced Keyboard
Mini-Tower Case

	Reg.	Cash
486dx 33MHz	$1595	$1495
486dx2 66MHz	$1795	$1695

ATC COMPUTER

5 LOCATIONS TO SERVE YOU!

LOS ANGELES	HOLLYWOOD	ORANGE	LAWNDALE	VAN NUYS
7150 Beverly Blvd.	6767 W. Sunset Blvd.	2440 N. Glassell Unit M	15800 Hawthorne Blvd. #D	6411 Sepulveda Blvd. #1J
(213) 938-6622	(213) 962-8610	(714)974-9868	(310)370-2655	(818)988-9806

PENTIUM PCI 60/66MHz NOW AVAILABLE!

MACRO 486 VESA LOCAL BUS
486DX2-66 LB...$1099
486DX2-50 LB...$1025
486DX-33 LB.....$879
EACH SYSTEM INCLUDES:
256K High Speed Cache • 4MB Memory On Board Exp. Up To 32MB • TEAC 1.2M or 1.44M FDD • 1MB Local Bus VGA Card • 2 Serial/1 Parallel/1 Game • Mid-Vertical Case • 230W Power Supply Enhanced 101 Keys Keyboard

MACRO Technologies

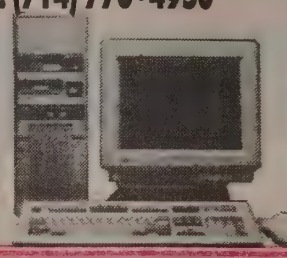
23151 VERDUGO, SUITE 102 • LAGUNA HILLS, CA 92653
TEL: (714) 580-1822 • **FAX: (714) 770-4950**
TECHNICAL SUPPORT: (714) 859-1014

CONSULTING, SALES, SERVICE, TRAINING & REPAIRS
Financing & Leasing Available

Maxtor® MAG INNOVISION

SPECIAL!
4862-66MHz w/CPU...$269
386DX-40MB w/CPU...$109
486SL-33MHz w/CPU....$95
NOVELL NETWORKS

Diamond STEALTH
FREE MOUSE W/ANY SYSTEM PURCHASE!
NOTEBOOKS AVAILABLE!



MACRO SERIES
486DX-66...$1029 486DX-33....$799
486DX-50...$950 386DX-40....$489
486DX2-50...$869 386SX-40....$299
256K High Speed Cache (128K For 33/40MHz) • 4MB Memory On Board Exp. Up To 32MB (1MB for SX) • TEAC 1.2M or 1.44M FDD • 2 Serial/1 Parallel/1 Game • Mid-Vertical Case • 230W UL Power Supply • Enhanced 101 Keys Keyboard

MOTHERBOARDS
VESA L/B 486DX2-66MHz w/256K & CPU...$579
VESA L/B 486DX-50MHz w/256K & CPU....$569
VESA L/B 486DX2-50MHz w/256K & CPU...$459
VESA L/B 486DX-33MHz w/256K & CPU....$415
ISA 486DX2-66MHz w/256K & CPU.....$615
ISA 486DX-50MHz w/256K & CPU.....$575
ISA 486DX-33MHz w/128K & CPU.....$399
486DLC-40MHz w/Math Co & CPU $169
486SX-25MHz & CPU $189
ISA 386DX-40MHz & CPU $115
ISA 486SLC-33MHz w/CPU.....$95

HARD & FLOPPY DRIVES
1.2FDD $52
1.44FDD $46
85MB IDE HDD.....$169
120MB IDE HDD.....$189
170MB IDE HDD.....$205
210MB IDE HDD.....$235
245MB IDE HDD.....$249
270MB IDE HDD.....$262
420MB IDE HDD.....$339
340MB IDE HDD.....$305
540MB IDE HDD.....$499
210MB SCSI HDD.....$269
540MB SCSI HDD.....$599
1.2GB SCSI HDD.....$975
2.0GB SCSI HDD.....$1995

VIDEO CARDS
MGP.....$15
SVGA 256K 16-Bit.....$33
SVGA 1MB 16-Bit $60
SVGA 1MB Windows Accelerator Card.....$75
Diamond Stealth 24-Bit 1MB Windows and AutoCad Accelerator Card.....$169
Orchid Fahrenheit VESA Local Bus 32-Bit $168
Diamond Viper VLB 2MB VRAM SVGA.....$379
Diamond Speedstar Pro VLB 1MB SVGA.....$124
Orchid Celsius VLB 1MB 1280x768.....$199
VESA Local Bus 1MB SVGA.....$109
CALL FOR ADDITIONAL OPTIONS!

CONTROLLERS
IDE w/ I/O (2S/1P/1G).....$23
IDE 2FD/2HDD $18
I/O (2S/1P/1G).....$17
VESA Local Bus IDE w/I/O Controller $35
Adaptec 1522 SCSI II Compatible Card Only...$99
Adaptec 1542CK SCSI w/Bus Master & Kit ...$279
Adaptec 2742K EISA 32-Bit SCSI w/Kit.....$395
Ultrastor 15C IDE Caching Controller exp. To 8MB.....$195
Ultrastor 14F SCSI Controller 32K Cache $210
Western Digital WD1009 16-Bit ESDI 24M-Bit Controller.....$155
MEMORY AND PRINTER MODULES AVAILABLE!

MONITORS
14" SVGA 1024x768, .39dp $213
14" SVGA 1024x768, .28dp $247
14" SVGA N-I 1024x768, .28dp $262
15" SVGA N-I 1024x768, .28dp $379
MAG 15" SVGA 1280x1024, .28dp $489
MAG 17" SVGA 1280x1024, .28dp $985
NEC 4FG 15" SVGA 1280x1024, .28dp $769
NEC 5FG 17" SVGA 1280x1024, .28dp...$1330
Mono 14" Monitor $95
Mono 14" VGA Monitor $112

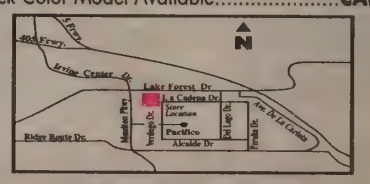
KEYBOARDS
101 Keyboard $27
Focus 2001 .....$38
Focus 9000 .....$59
Keytronic KT2000.....$34
Fujitsu 4700.....$41
Maxi Switch 101 .....$33

MODEMS
Internal 2400 Baud Modem.....$31
Internal 96/2400 Send/Receive Fax Modem ...$49
Internal 14.4 Send/Receive Fax Modem $125
External 2400 Baud Modem $57
External 96/24 Send/Receive Fax Modem.....$85
External Pocket Size 96/24 Send/Receive Fax Modem $115
External 14.4 Send/Receive Fax Modem $185
Internal 96/24 Voice Fax.....$79

MICE
Microsoft Compatible 3-Button.....$19
Microsoft Compatible 2-Button.....$21
Microsoft Serial Mouse (NEW!).....$49
Microsoft Bus Mouse $79
Microsoft PS2 Mouse $79
Trackball Mouse $33
Black Mouse $24

MISCELLANEOUS
Colorado 120MB.....$119
Colorado 250MB.....$179
Archive 250MB w/ Tape $159
Sound Blaster Pro $135
Pro Audio Spectrum 16 SCSI $139
CD-ROM Double Speed w/ Controller $215
CD-ROM SCSI 240ms.....$335

CHASSIS
MTC 959 Baby AT w/200W UL Power Supply (3x5.25", 2x3.5" Digital).....$57
MTC D2 Baby AT w/200W Power Supply (3x5.25", 1x3.5").....$52
MTC 121D Mini-Tower w/200W Power Supply (2x5.25", 3x3.5" Digital).....$55
MTC 121ND Mini-Tower w/200W Power Supply (2x5.25", 3x3.5").....$51
MTC 122 Mid-Tower w/230W Power Supply (2x5.25", 3x3.5" Digital).....$76
MTC 123 Full-Size Tower w/230W UL Power Supply (6FDD/HDD Digital).....$93
Black Color Model Available.....CALL



BUSINESS HOURS:
M-F 9:00AM TO 5:30PM
All prices subject to change without notice.

TEL: (714) 580-1822

FAX/MODEM

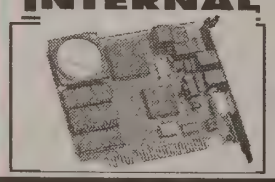
DIRECT FROM WHOLESALER

Pro[illegible] Reliability
5 Year Warranty For Fax/Modem

FOR WINDOWS: SEND/RECEIVE FAX MODEM + WINFAX & DOS Software

☆SPECIAL☆ **MODEL 9624HWIN (Internal) with WINFAX/Windows** $49
FAX Send/Receive 9600/9600bps, MODEM 2400bps, MNP5 Retail $149

INTERNAL



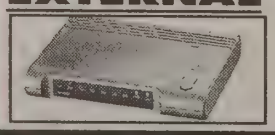
MODEL 1414VQH FAX S/R 14.4K/14.4Kbps MODEM 14.4Kbps $99
V.32/V.32bis, V.42/V.42bis, MNP5 UART 16550 Retail $199

MODEL 9624SH FAX Send 9600bps, MODEM 2400bps $25
V21, V22/V.22bis MNP5, Hayes Compatible. DOS Software Retail $69

MODEL 9648AH FAX S/R 9600/4800bps MODEM 2400bps $35
G III Fax, MNP5, Hayes Compatible. DOS Software Retail $89

MODEL 9624H FAX S/R 9600/9600bps MODEM 2400bps $39
G III Fax, MNP5 Hayes Compatible. DOS Software Retail $129

EXTERNAL

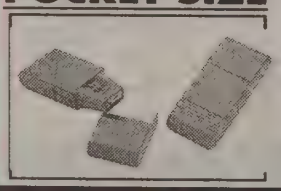


MODEL 9624E FAX S/R 9600bps/9600bps, MODEM 2400bps $69
G III Fax, MNP5, Hayes Compatible. DOS Software Retail $169

MODEL 9624VQE FAX Send/Receive 9600bps/9600bps $79
MODEM speed 2400bps MNP5 V.42 G III FAX Hayes DOS Softwares Retail $189

MODEL 1414VQE FAX S/R 14.4K/14.4Kbps MODEM 14.4Kbps $139
V.32/V.32bis, V.42/V.42bis, MNP5, Hayes Compatible Retail $249

POCKET SIZE



MODEL 9624SP FAX Send 9600bps, MODEM 2400bps $49
V21, V22/V.22bis MNP5, Hayes Compatible. DOS Software Retail $99

MODEL 9624P/AP FAX S/R 9600/9600bps, MODEM 2400bps $69
G III Fax, MNP5, Hayes Compatible. DOS Software Retail $159

MODEL 1414VQP FAX S/R 14.4K/14.4Kbps, MODEM 14.4Kbps $165
V.32/V.32bis, V.42/V.42bis, MNP5 Retail $299

PCMCIA 1414VQC FAX S/R 14.4Kbps, MODEM 14.4Kbps $269
Retail $399

☆**WINFAX** ($10) or **SUPERFAX** (-) for Windows w/Manual $59
(Purchase with above product)
Model 3000B Phone/Fax/Modem/Answering **Auto Switching Device** for a single phone line

☆☆☆☆ COMPUTER SYSTEMS (BARE BONES) ☆☆☆☆

386DX-40MHz $139
386DX-40M/B 128K Cache
Mini-Tower Case
Power Supply
Digital Display

486DLC-40MHz $199
486DLC-40M/B 128K Cache
Mini-Tower Case
Power Supply
Digital Display

386DX-40MHz+ $209
386DX-40M/B 128K Cache
Mini-Tower Case, Pwr Supply
Digital Display, Keyboard
1.44MB Floppy Drive
HD/FD Controller
w/2-S, 1-P, 1-G

486DLC-40MHz+ $269
486DLC-40M/B 128K Cache
Mini-Tower Case, Pwr Supply
Digital Display, Keyboard
1.44MB Floppy Drive
HD/FD Controller
w/2-S, 1-P, 1-G

YOKOHAMA Telecom Corp.
4095-M E. La Palma Ave.
Anaheim, CA 92807

TEL: 714-630-4061

Fax Order: 714-630-5069
VISIT OUR OFFICE TO SEE THE WINFAX DEMO!

CALL FOR DEALER Q'TY DISCOUNT

MON-FRI: 9:00AM TO 6:00PM
SAT: 9:00AM TO 2:00PM
Price, availability and specifications subject to change.
No refunds 30 days after purchase date.

MOTHERBOARDS AND PERIPHERALS
386DX-40 w/CPU 128K Cache (FULL SIZE) $99
486DLC-40 w/CPU+Math Co 128K Cache $159
486VL-BUS w/o CPU P24T 256K Cache $99
Super IDE I/O 2-Serial, 1-Parallel, 1-Game $13
VL-BUS Super IDE I/O Card 2S, 1P, 1G $34
Realtek SVGA w/256K Cache.....$29
Trident 9000C SVGA Card w/512K.....$38
Trident 8900D SVGA Card w/1MB $58
VL-BUS Cirrus SVGA Card 1MB Zero wait.....$79
1.44MB (3.5") Floppy Drive.....$35
1.2MB (5.25") Floppy Drive.....$39
KeyBoard 101K FCC Approved (Reliable).....$19
3-Button Mouse 200-2500bpi + Software $9
Cooling Fan + Heat Sink for 486 CPU $9
Mini-Tower Case w/Power Supply, Digital Display.....$39

FAX/MODEM INSTALLATION $10

AMERICAN EXPRESS VISA DISCOVER MasterCard

Rumors Of War

Remarks At Computers, Freedom, And Privacy Conference IV Chicago, March 26, 1994

BY BRUCE STERLING

Sterling, author of much science fiction and also of The Hacker Crackdown, *was the closing speaker at this year's CFP conference. In addition to the usual unlikely and sometimes uneasy fraternization of hackers, law enforcement, security experts, politicians, civil libertarians, and other interested parties, this year's conference included some unscheduled excitement, notably the early-morning hotel-room arrest by the FBI of a hapless attendee whose real name happened to resemble an alias of fugitive computer criminal Kevin Mitnick. (When the man's fingerprints eventually showed him not to be Mitnick, he was released.)*

This talk followed a panel on encryption, in which University of Wisconsin professor George Davida described how Bobby Ray Inman, then of the National Security Agency, attempted to suppress his cryptography research, NSA General Counsel Stuart Baker made a valiant if condescending approach to shroud Clipper and Digital Telephony in a veil of Mom and Apple Pie, and David Banisar of CPSR basically declined to go along with his arguments.

I've been asked to explain why I don't worry much about the topics of privacy threat raised by this panel. And I don't. One reason is that these scenarios seem to assume that there will be large, monolithic bureaucracies (of whatever character, political or economic) that are capable of harnessing computers for one-way surveillance of an unsuspecting populace.

I've come to feel that computation just doesn't work that way. Being afraid of monolithic organizations, especially when they have computers, is like being afraid of really big gorillas, especially when they are on fire.

The threat simply doesn't concur with my historical experience. None of the large organizations of my youth that compelled my fear and uneasy respect have prospered. Let me just roll off a few acronyms here. CCCP. KGB. IBM. GM. AEC. SAC.

It was recently revealed that the CIA has been of actual negative worth—literally worse than useless—to American national security. They were in the pockets of the KGB during our death struggle with the Soviet Union—and yet we still won. Japanese zaibatsus—Japan Inc.—the corporate monoliths of Japan—how much hype have we heard about that lately? I admit that AT&T has prospered, sort of—if you don't count the fact that they've hollowed themselves out by firing a huge percentage of their personnel.

Suppose that, say, Equifax turned into an outright fascist organization and started abusing privacy in every way they could. How could they keep that a secret? Realistically, given current employment practices in the Western economies, what kind of loyalty could they command among their own personnel? The low-level temps have no health insurance and no job security; the high-level people are ready to grab their golden parachutes and bail at any time. Where is the fanatically loyal army of gray flannel organization men who will swear lifelong allegiance to this organization, or *any* organization in this country with the possible exception of the Mafia?

I feel that the real threat to our society isn't because people are being surveilled but because people are being deliberately ignored. People drop through the safety nets. People stumble through the streets of every city in this country absolutely wrapped in the grip of demons, groping at passersby for a moment's attention and pity and not getting it. In parts of the Third World people are routinely disappeared, not because of high-tech computer surveillance but for the most trivial and insane reasons—because they wear glasses, because they were seen reading a book—and if they survive, it's because of the thin thread of surveillance carried out by Amnesty International.

There may be securicams running twenty-four hours a day all around us, but mechanical surveillance is not the same as people actually getting attention or care. Sure, rich people, like most of us here, are gonna get plenty of attention, probably too much, a poisonous amount, but in the meantime life has become so cheap in this society that we let people stagger around right in front of us exhaling tuberculosis without treatment. It's not so much information haves and have-nots as watch and watch-nots.

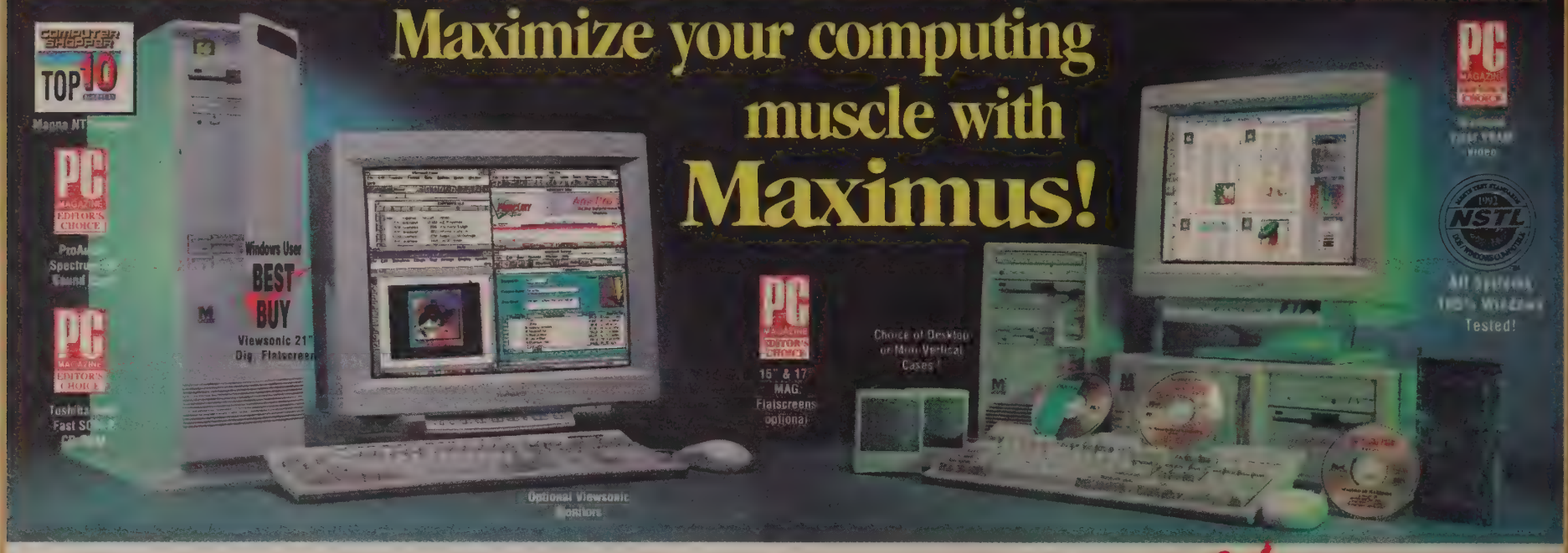
I wish I could speak at greater length more directly to the topic of this panel. But since I'm the last guy to officially speak at CFP IV, I want to seize the chance to grandstand and do a kind of pontifical summation of the event. And get some irrepressible feelings off my chest.

What am I going to remember from CFP IV? I'm going to remember the Chief Counsel of NSA and his impassioned insistence that key escrow cryptography represents normality and the status quo, and that unlicensed hard cryptography is a rash and radical leap into unplumbed depths of lawlessness. He made a literary reference to *Brave New World*. What he said in so many words was, "We're not the Brave New World, Clipper's opponents are the Brave New World."

And I believe he meant that. As a professional science fiction writer I remember being immediately struck by the deep conviction that there was plenty of Brave New World to go around.

Copyright © 1994 by Bruce Sterling. All rights reserved.

Maximize your computing muscle with Maximus!



PCI Powerhouse

World's Fastest Graphics with SCSI-2

- **4 Intel PCI** & 4 ISA expansion slots
- **16 MB RAM, 256K cache** exp. to 512K
- **520 MB** 11ms **SCSI-2** HD with cache
- **PCI SCSI-2 HD controller**—***132 MB/sec!***
- **Matrox PCI graphics accelerator, 2 MB VRAM**, 1280x1024, 16.7 million colors—***up to 90 WinMarks !!!***
- **15" flatscreen, .28dp, 1280x1024**, large edge-to-edge display—*low radiation MPR-II*
- Enhanced 101 soft-touch keyboard
- **Both 1.44 MB & 1.2 MB** floppy disk drives
- Serial mouse, 2S-1P-1G ports

One-year parts & lifetime labor warranty!

486DX2/66... $2445
Pentium/66....$3095 Pentium/60....$2995

PCI Graphics Blaster

Superfast PCI Graphics with 16MB RAM

- **4 Intel PCI** & 4 ISA expansion slots
- **16 MB RAM, 256K cache,** exp. to 512K
- **420 MB** 11ms IDE HD with cache
- **PCI IDE hard drive controller**
- **MaxGraf 32 PCI graphics accelerator, 1MB** RAM, 1280x1024, 16.7 million colors—***up to 40 WinMarks !!!***
- **15" flatscreen, .28dp, 1280x1024**—MPR-II
- Enhanced 101-key keyboard
- 1.44 MB 3.5" floppy disk drive
- High resolution serial mouse
- 2 serial, 1 parallel, 1 game ports

One-year parts & lifetime labor warranty!

486DX/33... $1845
486DX2/50....$1895 486DX2/66....$2045
Pentium/60....$2545 Pentium/66....$2645

VL-Bus Professional

Our Most-Popular VLB Workstation

- **VESA Local Bus slots, P24T Ready**
- **8 MB RAM** with **128K cache**
- **420MB** fast IDE hard drive with 64K cache
- **VLB IDE hard drive controller**
- **MaxGraf VLB graphics accelerator, 1MB** RAM, 1280x1024, 16.7 million colors—***up to 30 WinMarks !!!***
- **15" flatscreen** monitor 1280x1024, MPR-II
- Enhanced 101-key keyboard
- 1.44 MB 3.5" floppy disk drive
- High resolution serial mouse
- 2 serial, 1 parallel, 1 game ports

One-year parts & lifetime labor warranty!

486DX/33... $1395
486DX2/50....$1445 486DX2/66....$1595

Best Buy! Multi-Media

Double-speed CD-ROM & Soundcard

- **VESA Local Bus slots, P24T Ready**
- **4 MB RAM** with **128K cache**
- **420MB** fast IDE hard drive with 64K cache
- **VLB IDE hard drive controller**
- **MaxGraf VLB graphics accelerator, 1MB** RAM, 1280x1024, displays up to 16.7 million colors
- 14" SVGA-NI monitor, 1024x768 resolution
- Enhanced 101-key keyboard
- **Double-speed CD-ROM**, 2 spkrs, 4 CD titles
- **Sound Blaster compatible sound card**
- 1.44 MB FDD, serial mouse, 2S-1P-1G

One-year parts & lifetime labor warranty!

486DX/33... $1395
486DX2/50....$1445 486DX2/66....$1595

Your Best-Buy! MAGNA-P5/PCI

Pentium-Powered Windows PCI Powerhouse

- **4 Intel PCI** & 4 ISA expansion slots
- **8 MB RAM, 256K cache** exp. to 512K
- **420MB** 11ms IDE HD with cache
- **PCI IDE hard disk controller**
- **PCI MaxiGraf accelerator, 1MB**, 1280x1024, 16.7 million colors—***up to 40 Million WinMarks — blazing speed and 24-bit true-to-life color!***
- **14" SVGA .28dp, 1024x768,** clear & bright display—*non-interlaced!*
- Enhanced 101 soft-touch keyboard
- **1.44 MB 3.5"** floppy disk drive
- High-Resolution serial mouse
- 2S-1P-1G ports

Full-year Parts and Lifetime Labor Warranty!

Pentium/66 $2245 Pentium/60 $2145
486DX2/66....$1645

Media Kit - 2X

- **Double-speed CD-ROM**, Photo CD compat. 250ms access, 300KB/sec, multisession
- **16bit Sound Blaster Pro** compatible sound card
- **2 speakers, 4 CD titles**

$279*

Media Kit - 3X

- **Triple-speed NEC CSI-2 CD-ROM**, Photo CD compat. 195 ms access, 450 KB/sec
- **ProAudio Spectrum 16** sound card
- **Dual Labtec stereo powered external speakers, 4 CD titles**

$529* ProAudio 16 Card

* With System Purchase Only

Maximus Warranty & Support

- **30-day money back guarantee**
- **One year parts warranty**
- **Lifetime free labor warranty**
- **Lifetime technical support**
- **24 hour BBS support**

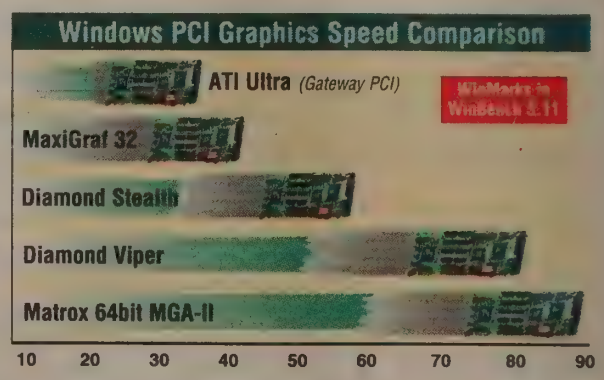
In addition to the five configurations shown here, we build dozens of award-winning nationally advertised and reviewed systems for every conceivable purpose.

As you can see in the chart, we design today's fastest Windows workstations using a wide range of video options, hard drives, monitors, and peripherals.

Maximus' newest pride-and-joy is the our Magna-Artist, a super graphic station with a 21" flatscreen, Matrox MGA-II video card with today's fastest 64bit video acceleration, a one-Gigabyte hard drive, and much much more!

Whether your needs are large or small, Maximus has the expertise you can rely on—right here in Southern California!

Call for your own specific needs and questions, and we'll be happy to discuss a Maximus system solution that is exactly right for you!



64bit MGA-II ...world's fastest speed in Windows!

Corporate & School PO's, Government Purchase Orders & CODs accepted. (oac)
(All prices above based on cash only.)

Call for directions to our store!
FAX 818.357.9140 ▪ MON-FRI 7-7 SAT 9-5

MAXIMUS
818.305.5933
or 818.305.5925
710 EAST CYPRESS AVE, UNIT-A, MONROVIA, CA 91016

I've been to all four CFPs, and in my opinion this is the darkest one by far. I hear ancestral voices prophesying war. All previous CFPs had a weird kind of camaraderie about them. People from the most disparate groups found something useful to tell each other. But now that America's premiere spookocracy has arrived onstage and spoken up, I think the CFP community has finally found a group of outsiders that it cannot metabolize. The trenchworks are going up and I see nothing but confrontation ahead.

Senator Leahy at least had the elementary good sense to backpedal and temporize, as any politician would when he saw the white-hot volcano of technological advance in the direct path of a Cold War glacier that has previously crushed everything in its way.

But that unlucky flak-catcher the White House sent down here—that guy was mousetrapped, basically. That was a debacle!

Who was briefing that guy? Are they utterly unaware? How on earth could they miss the fact that Clipper and Digital Telephony are violently detested by every element in this community—with the possible exception of one brave little math professor this high? Don't they get it that everybody from Rush Limbaugh to Timothy Leary despises this initiative? Don't they read newspapers? *The Wall Street Journal, The New York Times*? I won't even ask if they read their email.

That was bad politics. But that was nothing compared to the presentation by the gentleman from the NSA. If I can do it without losing my temper, I want to talk to you a little bit about how radically unsatisfactory that was.

I've been waiting a long time for somebody from Fort Meade to come to the aid of Dorothy Denning in Professor Denning's heroic and heartbreaking solo struggle against twelve million other people with email addresses. And I listened very carefully and I took notes and I swear to God I even applauded at the end.

He had seven points to make, four of which were disingenuous, two were half-truths, and the other was the actual core of the problem.

Let me blow away some of the smoke and mirrors first, more for my own satisfaction than because it's going to enlighten you people any. With your indulgence.

First, the kidporn thing. I am sick and tired of hearing this specious blackwash. Are American citizens really so neurotically uptight about deviant sexual behavior that we will allow our entire information infrastructure to be dictated by the existence of pedophiles? Are pedophiles that precious and important to us?

Do the NSA and the FBI really believe that they can hide the structure of a telephone switch under a layer of camouflage called child pornography? Are we supposed to flinch so violently at the specter of child abuse that we somehow miss the fact that you've installed a Sony Walkman jack in our phones?

Look, there were pedophiles before NII and there will be pedophiles long after NII is just another dead acronym. Pedophiles don't jump out of BBSes like jacks in the box. You want to impress me with your deep concern for children? This is Chicago! Go down to the projects and rescue some children from being terrorized and recruited by crack gangs who wouldn't know a modem if it bit them on the ass! Stop pornkidding us around! Just knock it off with that crap, you're embarrassing yourselves.

But back to the speech by Mr. Baker of the NSA. Was it just me, ladies and gentlemen, or did anyone else catch that tone of truly intolerable arrogance? Did the guy have to make the remark about our missing Woodstock because we were busy with our trigonometry? Do spook mathematicians permanently cooped up inside Fort Meade consider that a funny remark? I'd like to make an even more amusing observation—that I've seen scarier secret police agencies than his completely destroyed by a Czech hippie playwright with a manual typewriter.

Is the NSA unaware that the current president of the United States once had a big bushel-basket-full of hair? What does he expect from the computer community? Normality? Sorry pal, we're fresh out! Who is it, exactly, that the NSA considers a level-headed sober sort, someone to sit down with and talk to seriously? Jobs? Wozniak? Gates? Sculley? Perot—I hope to God it's not Perot. Bob Allen—okay, maybe Bob Allen, that brownshoe guy from AT&T. Bob Allen seems to think that Clipper is a swell idea, at least he's somehow willing to merchandise it. But Christ, Bob Allen just gave eight zillion dollars to a guy whose idea of a good time is Microsoft Windows for Spaceships!

When is the NSA going to realize that Kapor and his people and Rotenberg and his people and the rest of the people here are as good as people get in this milieu? Yes they are weird people, and yes they have weird friends (and I'm one of them), but there isn't any normality left for anybody in this society, and when it comes to computers, when the going got weird the weird turned pro! The status quo is *over!* Wake up to it! Get used to it!

Where in hell does a crowd of spooks from Fort Meade get off playing "responsible adults" in this situation? This is a laugh and a half! Bobby Ray Inman, the legendary NSA leader, made a stab at computer entrepreneurism and rapidly went down for the third time. Then he got out of the shadows of espionage and into the bright lights of actual public service and immediately started gabbling like a daylight-stricken vampire. Is this the kind of responsive public official we're expected to blindly trust with the insides of our phones and computers? Who made him God?

You know, it's a difficult confession for a practiced cynic like me to make, but I actually trust EFF people. I do; I trust them; there, I've said it. But I wouldn't trust Bobby Ray Inman to go down to the corner store for a pack of cigarettes.

You know, I like FBI people. I even kind of trust them, sort of, kind of, a little bit. I'm sorry that they didn't catch Kevin Mitnick here. I'm even sorry that they didn't manage to apprehend Robert Steele, who is about one hundred times as smart as Mitnick and ten thousand times as dangerous. But FBI people, I think your idea of Digital Telephony is a scarcely mitigated disaster, and I'll tell you why.

Because you're going to be filling out your paperwork in quintuplicate to get a tap, just like you always do, because you don't have your own pet court like the NSA does. And for you, it probably is going to seem pretty much like the status quo used to be. But in the meantime, you will have armed the enemies of the United States around the world with a terrible weapon. Not your court-ordered, civilized Digital Telephony—their raw and tyrannical Digital Telephony.

You're gonna be using it to round up wiseguys in streetgangs, and people like Saddam Hussein are gonna be using it to round up democratic activists and national minorities. You're going to strengthen the hand of despotism around the world, and then you're going to have to deal with the hordes of state-supported truck-bombers these rogue governments are sending our way after annihilating their own internal opposition by using your tools. You want us to put an axe in your

DCC's AMAZING CASH SALE!!!

PENTIUM-60 & 66MHz PCI Local Bus System

- Intel PENTIUM-60 or 66MHz Processor
- 64-bit processor complex
- 6 layer motherboard
- 3 PCI Local Bus (Bus Master slots)
- 5 EISA Bus Master slots
- HEAT-SINK w/FAN for Pentium (special heat transfer silicon to control heat)
- 256K Cache Memory
- 8MB RAM Installed (Exp. to 192MB)
- Mid Tower case w/300W UL power supply
- 1.44MB TEAC Floppy Drive
- 424MB IDE Hard Drive 12ms
- PCI IDE Floppy/Hard Drive controller card
- 2 Serial/1 Parallel/1 Game Port
- ET4000 W32P PCI Local Bus SVGA Graphics accelerator with 1MB RAM, 1280x1024
- 15" VESA Flat Screen NI SVGA Monitor,.28dp. 1280x1024, Edge-to-Edge Display
- 101 Keytronics Keyboard and Mouse
- Network-ready (w/purchase Ethernet/10BaseT)

	Regular	CASH
P5-60TE	$2699	$2599
P5-66TE	$2899	$2799

486DX-33 & 66MHz PCI Local Bus System

- Intel PENTIUM OverDrive ready, ZIF socket
- 4 PCI Local Bus (Bus Master slots), 4 ISA slots
- HEAT-SINK w/FAN for 66MHz System
- 256K Cache Memory
- 8MB RAM Installed (Exp. to 128MB)
- Mid-Tower case w/230W UL power supply
- 1.44MB TEAC Floppy Drive
- 424MB IDE Hard Drive 12ms
- PCI IDE Floppy/Hard Drive controller card
- 2 Serial/1 Parallel/1 Game Port
- ET4000 W32P PCI Local Bus SVGA Graphics accelerator with 1MB RAM, 1280x1024
- 15" VESA Flat Screen NI SVGA Monitor, .28dp. 1280x1024, Edge-to-Edge Display
- 101 Keytronics Keyboard
- Hi-Resolution Mouse
- Network-ready (w/purchase Ethernet/10BaseT)

	Regular	CASH
P433SX	$1629	$1589
P433DX	$1769	$1729
P466DX2	$1889	$1849

DCC's MULTIMEDIA EXTRAVAGANZA PAC

- Intel PENTIUM OverDrive ready, ZIF socket
- 3 VESA COMPLIANT LOCAL BUS Slots
- 256K Cache Memory
- 4MB RAM Installed (Exp. to 128MB)
- MULTIMEDIA DESKTOP CASE w/230W UL P/S
- 1.44MB TEAC Floppy Drive
- 250MB IDE Hard Drive 12ms
- IDE Floppy/Hard Drive controller card
- 2 Serial/1 Parallel/1 Game Port
- VESA Local Bus SVGA Graphics accelerator card w/1MB, 1280x1024 16.7 mill. colors
- 14" NON-INTERLACED Super VGA color Monitor, .28dp.1280x1024
- 101-Key Keyboard and Hi-Resolution Mouse
- Sound Blaster 16 (16-bit sound card)
- Panasonic CR-562 Double Speed CD-ROM
- Bundled Software - 7 CD Titles (Choose from 25 CD Titles Limited to only 1 encyclopedia title)
- Speakers & Microphone

	Regular	CASH
M433DX	$1629	$1599
M466DX2	$1749	$1719

486DX-33 & 66MHz EISA/VL-Bus System

- Intel PENTIUM OverDrive ready, ZIF socket
- 8 32-bit EISA slots (2 with 32-bit VL-Bus)
- HEAT-SINK w/FAN for 50MHz/66MHz System
- 256K Cache Memory
- 4MB RAM Installed (Exp. to 128MB)
- Mini-Tower case w/230W UL power supply
- 1.44MB TEAC Floppy Drive
- 250MB IDE Hard Drive 12ms
- IDE Floppy/Hard Drive controller card
- 2 Serial/1 Parallel/1 Game Port
- VESA Local Bus SVGA Graphics accelerator card w/1MB, 1280x1024 16.7 mill. colors
- 14" NON-INTERLACED Super VGA color Monitor, .28dp. 1280x1024
- 101-Key Keyboard
- Hi-Resolution Mouse
- Network-ready (w/purchase Ethernet/10BaseT)

	Regular	CASH
4SX-33EV	$1219	$1189
4DX-33EV	$1359	$1329
4DX-40EV	$1339	$1309
4DX2-66EV	$1479	$1449

486DX-33 & 66MHz VESA Local Bus System

- Intel PENTIUM OverDrive ready, ZIF socket
- 3 VESA COMPLIANT LOCAL BUS Slots
- HEAT-SINK w/FAN for 50MHz/66MHz System
- 256K Cache Memory
- 4MB RAM Installed (Exp. to 128MB)
- Mini-Tower case w/230W UL power supply
- 1.44MB TEAC Floppy Drive
- 250MB IDE Hard Drive 12ms
- IDE Floppy/Hard Drive controller card
- 2 Serial/1 Parallel/1 Game Port
- VESA Local Bus SVGA Graphics accelerator card w/1MB, 1280x1024 16.7 mill. colors
- 14" NON-INTERLACED Super VGA color monitor, .28dp.1280x1024
- 101-Key Keyboard
- Hi-Resolution Mouse
- Network-ready (w/purchase Ethernet/10BaseT)

	Regular	CASH
486SX-33V	$1019	$989
486DX-33V	$1159	$1129
486DX-40V	$1139	$1109
486DX2-66V	$1279	$1249

POPULAR UPGRADES FOR DCC SYSTEMS

ADD THESE PRICES TO VL-BUS SYSTEMS

Orchid Fahrenheit VL-Bus	$79
Orchid Celsius w/2MB VL-Bus	199
Diamond Viper w/2.5MB VRAM VL-Bus	299
14" VESA NI Color Monitor (.28dp)	30
15" VESA Flat Screen Monitor (.28dp)	129
17" VESA Flat Screen (.26dp)	475
NEC 4FGe 15" Flat Screen (.28dp)	475
424MB 10ms IDE Hard Drive	60
545MB 9ms IDE Hard Drive	160
VL-Bus IDE cache ctrl. w/2MB	199
VL-Bus SCSI controller card	129
96/24 fax/modem w/Windows software	49
96/24 fax/modem w/Voice Mail, fax back	109
14.4 fax/modem w/Windows software	119
14.4/14.4 pocket fax/modem	179
Toshiba 3401B SCSI-2 CD-ROM 200ms	325
NEC CDR-510 SCSI-2 CD-ROM 195ms	345

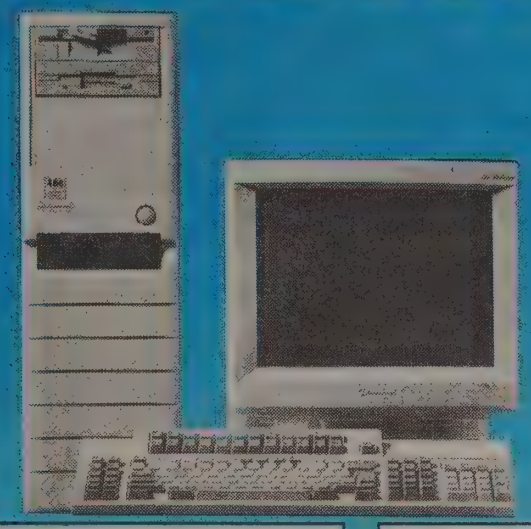
ADD THESE PRICES TO PCI SYSTEMS

545MB 9ms IDE Hard Drive	$125
545MB 9ms SCSI-2 Hard Drive	145
Diamond Viper w/2MB VRAM PCI	280
PCI SCSI-2 controller card	75
1.08GB SCSI-2 Quantum Hard Drive	465
17" VESA Flat Screen (.26dp)	365

90 DAYS SAME AS CASH • BUSINESS LEASING AVAILABLE

One Year Parts - Lifetime Labor Warranty

VESA LOCAL BUS COLOR NOTEBOOK



- Intel 486 Processor w/8K cache
- Built-in CPU fan
- 4MB RAM installed (Exp. to 20MB)
- Local Bus IDE HD/FD controller card
- Local Bus SVGA graphics card
- 10" Mono Backlit VGA LCD display
- Screen upgradable to Color LCD
- 3.5" 1.44MB Floppy Drive
- 120MB IDE Hard Drive
- 1 Serial, 1 Parallel port
- 2 x TYPE II and 1 x TYPE III PCMCIA slot
- Built-in trackball mouse
- Weight 6lbs. with battery
- External AC adapter
- Carrying case
- One year parts and labor warranty

	Mono	Dual Scan Color	Active Color
486DX-33 4MB/170MB	$1680	$2195	$3195
486DX2-66 4MB/170MB	$1880	$2395	$3395

245MB HDD upgrade from 170MB	$125	96/24 Pocket Fax/Modem	$99
340MB HDD upgrade from 170MB	$220	14.4/14.4 Pocket Fax/Modem	$179
4MB RAM upgrade	$225	PCMCIA 96/24 Fax/Modem	$165
Extra Battery	$95	PCMCIA Ethernet Network Adapter	$215
Car Adapter	$95	Pocket Ethernet Network Adapter	$145
Laplink Cable	$25	Docking Station for VL-Bus Notebook	$490

386DX-40 SYSTEM

- 386DX-40 CPU w/128K cache
- 4MB RAM installed (Exp. to 32MB)
- Mini-Tower case w/230W UL power supply
- 3.5" 1.44MB Floppy Drive
- 170MB IDE Hard Drive
- IDE Floppy/Hard Drive controller card
- 2 Serial, 1 Parallel/ 1 Game port
- SVGA graphics card w/1MB RAM
- 14" Super VGA color Monitor, 1024x768 .28dp
- 101-key Keyboard
- Hi-Resolution Mouse
- Network-ready (w/Purchase Ethernet/10Base-T)

Regular $865 **CASH $845**

MICROSOFT DOS 6.2	$45
MS WINDOWS FOR WRKGRP 3.11	$65
14.4 FAX/MODEM FOR WINDOWS	$119
PRO AUDIO SPECTRUM 16	$125
SOUND BLASTER 16 BASIC	$125
SOUND BLASTER 16 ASP SCSI-2	$215
AMPLIFIED SPEAKERS	$49
MICROPHONE	$7
A/C ADAPTER	$7
LOGITECH MOUSEMAN	$39
MICROSOFT MOUSE 2.0	$39
MATROX SVGA w/2MB VRAM PCI LB	$405
DIAMOND VIPER SVGA w/2MB VRAM PCI LB	$385
NE2000 ETHERNET/10BASE-T NIC	$49
MITSUMI CD-ROM w/CTRL.	$169

IBM DOS 6.1 (Retail Package)

$15

TEAC

1.44MB 3.5"
1.2MB 5.25"
DUAL MEDIA FLOPPY DRIVE

$99

SB16-S Multimedia Kit $675

*** Sound Blaster 16 SCSI-2 ASP**

1.) 16-bit stereo playback and recording
2.) Stereo 20 voice, 4-operator OPL3 FM music synthesizer
3.) VoiceAssist, Speech Recognition System

*** NEC CDR-510 SCSI-2 TRIPLE 'Speed CD-ROM'**

1.) 600MB data capacity
2.) 450KB/sec (double speed) transfer rate
3.) 195ms access time: exceeds current MPC standard

*** Bundled Software– 7 CD Titles**

1.) Compton's Encyclopedia
2.) Space Adventure
3.) Dinosaur Adventure
4.) Mavis Beacon Teaches Typing
5.) Chess Master 3000
6.) U.S. Atlas
7.) World Atlas

SB 16 Multimedia Kit $425

*** Sound Blaster 16**

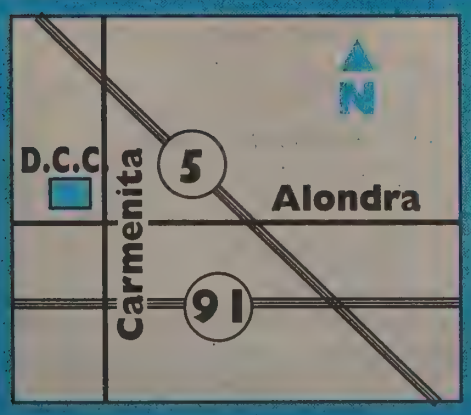
1.) 16-bit stereo playback and recording
2.) Stereo 20 voice, 4-operator OPL3 FM music synthesizer
3.) Microphone Automatic Gain Control (AGC) Amplifier

*** Panasonic CR-562 DOUBLE Speed CD-ROM**

1.) 540MB data capacity
2.) 300KB/sec (double speed) transfer rate
3.) 320ms access time: exceeds current MPC standard

*** Bundled Software– 7 CD Titles**

1.) Compton's Encyclopedia
2.) Space Adventure
3.) Dinosaur Adventure
4.) Mavis Beacon Teaches Typing
5.) Chess Master 3000
6.) U.S. Atlas
7.) World Atlas



VISA MasterCard DISCOVER

DYNAMIC COMPUTER CO.

(310) 407-1026

FAX: (310) 407-1030

15605 Carmenita Rd., Suite #106 • Santa Fe Springs, CA 90670

Business Hours:

Mon. - Fri.: 10AM to 7PM & Saturday: 10AM to 6PM

hand and you're promising to hit us with only the flat side of it, but the Chinese don't see it that way; they're already licensing fax machines and they're gonna need a lot of new hardware to gear up for Tiananmen II.

I've talked a long time, but I want to finish by saying something about the NSA guy's one real and actual argument. The terrors of the Brave New World of free individual encryption. When he called encryption enthusiasts "romantic" he was dead-on, and when he said the results of spreading encryption were unpredictable and dangerous he was also dead-on, because, people, encryption is not our friend. Encryption is a mathematical technique, and it has about as much concern for our human well-being as the fact that seventeen times seventeen equals 289. It does, but that doesn't make us sleep any safer in our beds.

Encrypted networks worry the hell out of me and they have since the mid 1980s. The effects are very scary and very unpredictable and could be very destabilizing. But even the Four Horsemen of Kidporn, Dope Dealers, Mafia, and Terrorists don't worry me as much as totalitarian governments. It's been a long century, and we've had enough of them.

Our battle this century against totalitarianism has left terrible scars all over our body politic, and the threat these people pose to us is entirely and utterly predictable. You can say that the devil we know is better than the devil we don't, but the devils we knew were ready to commit genocide, litter the earth with dead, and blow up the world. How much worse can that get? Let's not build chips and wiring for our police and spies when only their police and spies can reap the full benefit of them.

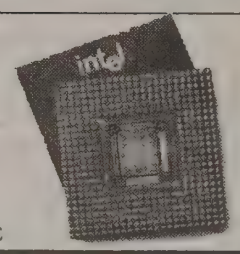
But I don't expect my arguments to persuade anyone in the NSA. If you're NSA and I do somehow convince you, by some fluke, then I urge you to look at your conscience—I know you have one—and take the word to your superiors and if they don't agree with you—*resign.* Leave the Agency. Resign now, and if I'm right about what's coming down the line, you'll be glad you didn't wait till later.

But even though I have a good line of gab, I don't expect to actually argue people out of their livelihood. That's notoriously difficult.

So CFP people, you have a fight on your hands. I'm sorry that a community this young should have to face a fight this savage, for such terribly high stakes, so soon. But what the heck; you're always bragging about how clever you are; here's your chance to prove to your fellow citizens that you're more than a crowd of net-nattering MENSA dilettantes. In cyberspace one year is like seven dog years, and on the Internet nobody knows you're a dog, so I figure that makes you CFP people twenty-eight years old. And people, for the sake of our society and our children you had better learn to act your age.

Good luck. Good luck to you. For what it's worth, I think you're some of the best and brightest our society has to offer. Things look dark but I feel hopeful. See you next year in San Francisco. ■

intel inside



PENTIUM *OVERDRIVE* PROCESSOR UPGRADEABLE

UNICOMP SYSTEMS

(310) 348-8105
FAX (310) 348-8181
24 Hour Tech Support

HELIX 486/DX2-66 MHZ EISA/VLB System
Intel 80486 DX2-66 **MHz,** EISA/VESA/*Pentium* **Ready Motherboard**
8K internal, Zero Wait State, Heat Sink with Fan
8MB RAM 60ns., 256K Cache
365MB Hard Drive with 256K Cache
Teac 1.2MB & 1.44MB Floppy Drives
32 Bit EISA IDE Controller
Double Speed **CD ROM** plus Complete Bundle
250 Watt Power Supply
Mid Tower with Digital Display
111 Focus Enhanced **Programmable** Keyboard
and High Resolution Mouse
32-Bit Super VGA Accelerator VESA Local Bus Board
with 1280*1024*256* NI with 2MB VRAM very High Refresh Rate
17" Super VGA Flat Screen 1280*1024 NI Color Monitor, 0.28 dp
1 Year Full Warranty
$2,395.00

HELIX 486/66 MHZ VLB System
IBM 486/SLC2-66 MHz, VESA LOCAL BUS Motherboard
Zero Wait State
4MB High Speed RAM
210MB CONNER Hard Drive w/256K Cache Built-in
Teac 1.2 MB & 1.44MB Floppy Drives
32-Bit VESA IDE Controller
230 Watt Power Supply
Mini Tower with Digital Display
9600 S/R Fax Modem w/Bitcom & Bitfax Software
101 Focus Enhanced Keyboard & High Resolution Mouse
32-Bit VESA Super VGA Local Bus Accelerator High Speed Board
with 1024*768*256 Non-Interlaced Color w/1MB RAM-very high refresh rate
14" Super VGA 1024*768 Non-Interlaced Resolution
w/0.28dp. Color Monitor
1 Year Full Warranty
$1,095.00

HELIX 486/40 MHZ ISA System
486-DLC/40 MHz w/ Math Co-Processor, ISA Motherboard
4MB RAM, 128K Cache
170MB Hard Drive with 128K Cache
Teac 1.2MB & 1.44MB Floppy Drives
IDE Controller
230 Watt Power Supply
Mini Tower with Digital Display
101 Enhanced Keyboard and High Resolution Mouse
Super VGA High Speed Accelerator Board
with 1024*768*256NI with 1MB RAM very high Refresh Rate
14" Super VGA 1024*768 Color Monitor
1 Year Full Warranty
$795.00

Complete Computer Solutions for Today's Business. . . .
SYSTEMS INTEGRATION • CONSULTING • NETWORKING • CUSTOM PROGRAMMING

Networking Solutions

NOVELL	*UNIX*
NetWare 3.12	Solaris 1.x & 2.x
IBM & Macintosh Workstations	NFS, NIS, TCP/IP
CNE on Staff	DECnet, SUN Workstations

Novell Certified NetWare Engineer

*Installation & Upgrade
*E-Mail & Internet
*File Server Setup & Configuration
*Training System Administration
*DOS & Windows Workstations
*On Site Service & Maintenance
*UPS and Tape Backup Systems

Multimedia Kits

Triple Speed NEC CD-ROM, 195ms., 16 Bit
Audio Board Plus Amplified Speakers and 6 Premium Software Titles, 450kb, sec. Transfer Rate, SCSI-2 Interface Pro Box.
Internal:.....$519.00

Double Speed SONY CD-ROM, 350ms., 16 Bit
with Proprietary Adapter Card, Kodak Multi-Session Photo-CD Compatible, 300Kb/Sec. Transfer Rate.
Internal:.....$295.00

Internal SONY CD-ROM.....$169.00

SOFTWARE
Call for popular software packages at dealer prices. . .
Unicomp Systems specializes in custom application programming. Please call for a free consultation with one of our software representatives.

BAREBONES
386SX-40 .....$199
386DX-40.....$249
486SLC $219
Above items include:
Mini Tower, 230 W Power, 101 Keyboard, Mouse, 1.44 Floppy, IDE Controller, and VGA Card.
TAPE-BACKUP SYSTEMS
250MB Internal W/TAPE/SOFTWARE $139
FAX/MODEM:
14.4K bps internal.....$89

IMAGE SERVICE CENTER: 24 HOUR SUPPORT & REPAIRS, ALL MAJOR BRANDS

IMAGE PT - 60 MHZ

$2850

- INTEL PENTIUM-60MHZ PROCESSOR
- 4 PCI SLOTS, 4 ISA 16-BIT SLOTS
- 256K CACHE EXP TO 512K TOTAL CACHE
- 8MB 70 NS RAM, EXP TO 128MB TOTAL
- 420MB HARDDISK DRIVE W/256 CACHE (WESTERN DIGITAL)
- TEAC 1.2 & 1.44 FLOPPY DISK DRIVES
- 15" OPTIQUEST 2000DX SVGA MONITOR .28 DP 1280X1024, LOW RADIATION, "GREEN"
- 1 PARALLEL/2 SERIAL/1 GAME PORT
- PCI VIPER SVGA CARD 2MB VRAM
- 101 ENHANCED KEYBOARD
- HIGH RESOLUTION SERIAL MOUSE
- MID SIZE TOWER CASE (250WT PS)

IMAGE PT-66MHZ **$2975**

VESA LOCAL BUS IMAGE 486SLC-66 VLB

$1249

- 486SLC-66 VL IBM CPU, AMI BIOS
- Math-Coprocessor/Internal 16K Cache Memory
- 128K Static RAM Cache
- 4MB 70ns RAM Memory on Board
- 250MB 12.9ms IDE hard drive, w/64K cache Western Digital Caviar
- 1.2 and 1.44 Floppy Drives
- 14" Optiquest Super VGA Monitor, .28DP, non-interlaced at 1024x768, edge to edge
- 32-Bit GENOA VL-Bus SVGA Adaptor true color (16.7 million colors), 1MB RAM
- 32-Bit 2HD/2FD hard drive controller
- 2 Serial, 1 Parallel and 1 game ports
- Tower Case with 230 watt power supply
- Enhance 101 Keybord
- 400-DPI High Resolution Serial Mouse

INTEL 486DX-33 w/256K VLB **$1349**
INTEL 486DX2-66 w/256K VLB **$1499**

Quality Hardware Should Come with Unbeatable Support.

SERVICE AND SUPPORT

30-day full moneyback guarantee
One-year instant replacement warranty
Lifetime labor warranty
24-hour technical support
FREE delivery and installation*
Complete network solutions available
Corporate, government and educational discounts
Custom configurations available
On-site service available

Special Purchase

IMAGE PRO MULTIMEDIA KIT

$575

- NEC 3 SPEED CD-ROM SCSI
- Media Vision Pro Audio Spectrum 16 W/SCSI Interface
- Amplified Dual Speakers
- 10CD Titles

ISA IMAGE 486SLC-66

$1149

- 486SLC-66 IBM CPU, AWARD BIOS
- Math-Coprocessor/Internal 16K Cache Memory
- 64K Static RAM
- 4MB 70ns RAM Memory on Board
- 250MB 12.9ms IDE hard drive, w/64K cache
- Western Digital Caviar
- 1.2 and 1.44 Floppy Drives
- 14" Optiquest Super VGA Monitor, .28DP non-interlaced at 1024x768
- 24-Bit Cirrus Logic SVGA true color card (16.7 million colors), 1 MB RAM
- 16-Bit 2HD/2FD hard drive controller
- 2 Serial, 1 Parallel and 1 game ports
- Tower Case with 230 watt power supply
- Enhance 101 Keyboard
- 400-DPI High Resolution Serial Mouse

INTEL 486DX-33 w/256K Cache **$1275**
INTEL 486DX2-66 w/256K Cache **$1449**

BEST DELIVERED PRICES IN TOWN GUARANTEED!

OS/2

intel inside

MICROSOFT WINDOWS NT Version 3.1

Caviar WESTERN DIGITAL

Hercules

yes NetWare

IMAGE MICROSYSTEMS *Monthly Specials*

IBM PORTABLE PRINTER 2LBS.	$225
WESTERN DIGITAL 420MB	$295

1MB 486-66MHZ ISA	$259
1MB 486-66MHZ VLB	$348

A: IMAGE MULTIMEDIA KIT

$349

Mitsumi CD-ROM 250ms 300Kb/s Dual Speed
Pro Audio 16
Dual Speakers
Multimedia Encyclopedia/Animals
U.S. Atlas/World Atlas
Typing Teaching/Chess Master

B: IMAGE MULTIMEDIA KIT

$495

Toshiba 3401B CD-Rom 200ms **330Kb/s**, Multi Spin, Multi Speed
Pro Audio Spectrum 16
Dual Speakers
Multimedia Encyclopedia/Animals
U.S. Atlas/World Atlas
Typing Teaching/Chess Master

15% RESTOCKING FEE ON PARTS RETURN

SERVICE
(310) 815-1243

IMAGE MICROSYSTEMS
8885 Venice Blvd., Suite 105, Los Angeles, CA 90034

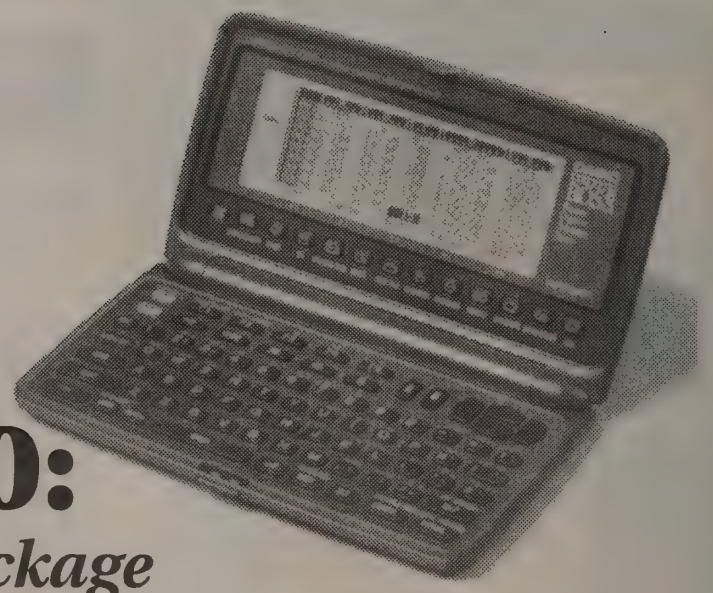
SALES
(800) 729-3400

Ask for our energy-saver green PC

*Limited delivery and installation area. Terms and conditions: All systems have a one year warranty on parts and lifetime warranty on labor. RMA is required for all returns and products must be in "like new" condition. Shipping and handling charges are not included and will not be refunded. Price, availability and specifications are subject to change without notice. Purchase orders subject to approved credit. All brand names are brand names of their respective companies. Intel and Intel logos are trademarks of Intel Corporation.

MasterCard VISA AMERICAN EXPRESS DISCOVER

BUSINESS SOLUTIONS



Casio SF-M10:

Functionality In Small Package

BY MITSU HADEISHI

Casio has recently released a slightly smaller version of its SF-R20, a pocket-sized organizer with built-in spreadsheet capabilities, which they call the SF-M10. Much like the SF-R20 in many respects, it comes with half the memory (128K instead of the 256K in the SF-R20), but this is plenty of RAM for many people. Because of the efficient memory usage of the Casio series (like other dedicated organizers), it can use more of its 128K for data storage instead of using it for workspace RAM the way some less efficient full-blown palmtop computers do. The SF-M10 can be had for around $250 street, which is about $50 less than its larger cousin.

The primary advantage of the SF-M10 over the R20 comes from its smaller size (it measures 6 1/2" x 3 7/8" x 3/4", more than a half-inch less wide) and lower price. It's more in the price range of the consumer who's looking for a capable organizer but who doesn't need the full power (and cost) of a 256K machine.

Otherwise, the capabilities are quite similar; it includes all of the R20's functions—the calendar/scheduler, the memo pad, world time, to-do list, calculator, and other miscellaneous functions. Most useful of all, however, is the built-in Lucid "3D" spreadsheet. The spreadsheet is quite capable, including a simple macro facility and financial and scientific functions; in many ways it's more convenient than the built-in memo pad for taking notes, because the user interface of the spreadsheet is more sophisticated than that of the memo pad function.

One of the nice things about Casio's SF series is the sturdy connector between the keyboard/CPU and the display. Some associates and I have found that this component often goes out on our Sharp Wizards; sometimes it goes bad very rapidly, meaning that it is a good idea to get an extended replacement warranty from your dealer on these kinds of units. On the SF series, however, the connector is housed in a solid cylindrical casing, and appears much more rugged than the designs used on most other organizers. Battery life is quite respectable; according to the documentation, over one hundred hours of continuous use; this can mean that months go by before you use up the batteries.

Despite the M10's smaller size, its screen is approximately the same size as the larger R20's. It also displays just as many characters, making it useful for displaying moderate-sized spreadsheets (of course, the screen is much smaller than a standard PC, but for an organizer it's quite spacious at 10 x 40 characters). If you use the "title" function of the spreadsheet to turn off the row and column labels, this is wide enough to use for a simple checkbook spreadsheet or an expense tracking spreadsheet.

The keyboard is still very usable on the M10; it's QWERTY style like the R20, but despite the smaller size it's spacious enough. Since it does not have a numeric keypad, the keys are spaced widely enough to make typing reasonably easy (though of course true touch typing is not really possible). The SHIFT key does not work like its normal-keyboard counterpart; you have to press it, then release it, then hit the key you want shifted. After a short time this becomes second nature, and not as annoying as it sounds. Overall, the keyboard is a strong point of this particular organizer; they did a good job with the small space available. Many other organizers suffer from more difficult-to-use keyboards with even more cramped layouts.

Unfortunately, this Casio, like all the others in the B.O.S.S. series, suffers from a rather awkward user interface. This is ameliorated to a large extent, however, by the SF Series' online help facility and the fact that the spreadsheet can be used for many functions that might otherwise require some of the more cumbersome features.

The spreadsheet itself, written by Lucid (not Casio), is a far better example of user-interface design. Unfortunately there is no way to transfer data between the spreadsheet and the other functions without using the optional PC Link package, which costs an additional $130 or so street, and allows you to back up and transfer spreadsheets and other data between your Casio and your PC. Versions are available for both the Macintosh and the PC.

Overall, the M10 is a good value and a usable, if imperfect, product. I recommend it to those who want quality, who would rather spend a bit less, who want something lighter and smaller than the R20, and who are willing to put up with a few operational quirks common to all Casio B.O.S.S. organizers. All of the low-end organizers on the market today have some problems of one kind or another, but this is the least expensive organizer with a built-in spreadsheet capability. As such it represents an excellent value for a wide variety of light-duty applications.

RESOURCES:

Bus Toaster PCMCIA SCSI Adapter
New Media Corporation,
Irvine Spectrum
15375 Barrance Pkwy,.Bldg. B101
Irvine, CA 92718
(714)453-0100

Casio B.O.S.S. SF-M10
Casio, Inc.
1-800-762-1241

Franklin Fantasy Baseball Analyst for the Digital Book System-2
Franklin Electronic Publishers Inc.
122 Burrs Rd.
Mount Holly, NJ 08060
(609)261-4800

HP-100LX
Hewlett-Packard
1-800-538-8787

Copyright © 1994 by Mitsu Hadeishi. All rights reserved.

PENS AND PALMTOPS

News Tidbits

•Hewlett-Packard has announced that it's now shipping 2MB versions of the HP 100LX, priced comparably to the current

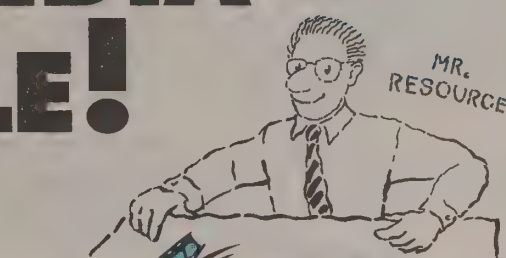
MAY MULTIMEDIA MADNESS SALE!

M.V. RESOURCE MULTIMEDIA KIT

ONLY $249

- A perfect starter multimedia upgrade kit
- Great 16-bit sound card
- Double-speed CD-ROM drive
- Amplified speakers

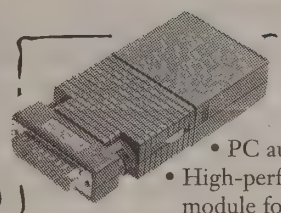
- Includes 5 exciting software titles: Battle Chess, Where in the World is Carmen Sandiego?, Greens, F17 and Railroad Tycoon



MULTIMEDIA BUYER'S CLUB

When you make a purchase from Media Vision Resource ask about becoming a member of the Multimedia Buyer's Club and receive a FREE **COREL** CD-ROM.

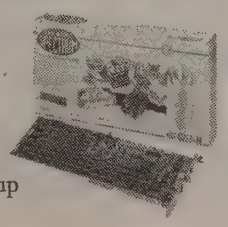
AUDIO PORT



- PC audio device
- High-performance portable module for PCs & notebooks
- Plugs into parallel port of any IBM PC/AT, PS/2 or notebook
- Transport Sound™ technology & built-in speaker
- Headphone & external speaker outputs

$65

PRO MOVIESPECTRUM

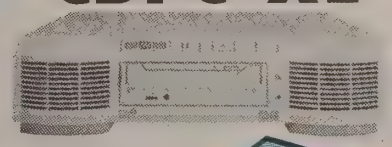


- Create professional desktop videos on your PC
- Smooth real-time capture at 30 frames per second up to 160 × 120
- Still-frame capture with resolutions of 320 × 240 & 640 × 480
- 32,768 vibrant colors
- Includes Microsoft Video for Windows

$99

Add CDPC Bass Enhancement for only $65!

CDPC XL



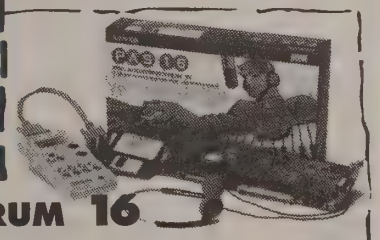
- The first complete, fully-integrated, multimedia solution
- Includes dual-speed CD-ROM drive, amplifier, speakers & MIDI
- Multi-session Photo CD ready
- Brings high-quality sound to your PC with the best in 16-bit digital audio
- Includes 5 software titles: Where in the World is Carmen Sandiego?, Action!, Compton's Multimedia Encyclopedia, Battle Chess, and Dinosaur Adventure

ONLY $399

- **Order instantly from experienced multimedia sales representatives**
- **30-day money back guarantee on hardware products only**
- **Toll-free technical support 7 days a week**
- **Overnight delivery available**
- **All major credit cards accepted**

Ask about other great multimedia products available through Media Vision Resource

PAS LC
PAS NuBus
$99



PRO AUDIOSPECTRUM 16 FOR THE MAC

- The ultimate in affordable sound upgrades
- True 16-bit sampling & playback, 4-channel input mixer, MIDI and headphones
- Easy installation
- Includes Interplay's Out of This World

Call 1-800-684-6699
Monday thru Saturday, 6am to 6pm PST
International customers call (510) 770-8600

VISA MasterCard AMERICAN EXPRESS DISCOVER

© 1994 Media Vision, Inc., 47300 Bayside Parkway, Fremont, CA 94538. (510) 770-8600. Pro MovieSpectrum, CDPC XL, Audio Port & Pro AudioSpectrum 16 for the Mac are all trademarks of Media Vision, Inc. Any other trademarks or registered trademarks are the property of their respective holders. Any and all bundled software and prices are subject to change without notice.

MEDIA VISION RESOURCE

Sharp OZ-9520 Wizard and accessories
Sharp Corporation
1-800-321-8877.

Silicon Storage PCMCIA Flash RAM cards
Silicon Storage Technology, Inc.
1171 Sonora Ct.
Sunnyvale, CA 94086

1MB model. The new version will allow a larger amount of RAM to be allocated to virtual disk storage.

•New Media Corporation is shipping the high-speed Bus Toaster PCMCIA SCSI adapter. The Bus Toaster operates at speeds comparable to an ISA bus SCSI device; according to the company, a benchmark using a 386 notebook computer and a Maxtor 7213 hard disk showed the burst, sequential read/write, and random read/write speeds were the same as that measured with an Adaptec 1521 ISA bus SCSI adapter. The sustained random read/write data rate was over 1MB/second, bursting to speeds of approximately 5MB/second. This is about the maximum throughput one can expect from an ISA-class device, and it demonstrates the PCMCIA interface being pushed to its limit. The BusToaster draws 190mA of power during operation, and when not in use, it goes into "sleep" mode, drawing only 15mA.

The adapter ships with New Media Corporation's own ASPI manager as well as CorelSCSI v2. One advantage of the Bus Toaster is that it can be plugged into the computer even while it is on; this is a design characteristic of the PCMCIA interface, and the BusToaster takes advantage of it by allowing its ASPI manager to dynamically detect devices on the SCSI bus even if they're connected after the computer has booted. ISA SCSI adapters lack this capability.

The Bus Toaster uses the New Media Corporation's ultra-thin cable (1/8 inch) technology, which allows a cable narrow enough to enable two cards with similar designs to be used side-by-side even when they are stacked next to each other. Most other PCMCIA SCSI cards have thicker cables which block the card in a neighboring slot. Cables are available in Centronics, SCSI II, and DB25 configurations. Retail price for the card is $394 including CorelSCSI v2, and $359 without. The card is backed by a lifetime warranty.

•Silicon Storage Technology has announced a line of low-power, high-capacity PCMCIA Flash RAM cards called the SuperFlash cards and the E2CARD series. These cards operate at both 3.3V and 5V (3.3V operation is supported only in some computers). The SuperFlash Card line has capacities from 1 to 4MB, and the E2CARD has capacities ranging from 5 to 15. The unique advantage of these cards is that they are engineered to allow precise, high-speed 512-byte sector erasure without spillover, and erasure can be done very rapidly compared to other Flash RAM cards. This allows DOS FAT filesystem compatibility without the need for a special "Flash File" system.

•Franklin Electronic Publishers, Inc., maker of the Franklin Digital Book System-1 and -2, inexpensive portable data-retrieval devices, has announced the Franklin Fantasy Baseball Analyst, a Flash ROM card that gives career statistics for over one thousand major league baseball players. The card is designed to be used in conjunction with the DBS-2, and utilizes Flash ROM technology, allowing Franklin to update statistics in the card at regular intervals. The card will retail for $249.75, including one update, and will have a maximum annual subscription renewal rate of $49.95.

Wizard Accessories

•Sharp Corporation, creators of the most popular line of personal organizers, the Wizard series, has created another in its line of Wizard organizers, the OZ-9520.

Like the OZ-9600II, the top-of-the-line model, it includes a touch screen and 512K of RAM. It is slightly smaller than the 9600, but it includes additional fax and email support capabilities which are not present in the 9600. The terminal emulator in the 9520 includes VT100 support, making it easier to use dial-up services which support that terminal emulation mode. The 9520 uses the combined pen-based and keyboard interface also found in the 9600. The unit lists for $719.99, but can be found for around $550 street price.

•A couple of new game cards have recently been released for the Sharp Wizard.

Organizer Chess (OZ-718M), allows storage of up to ten games for replay or review. One hundred famous historical games are also stored in the card for review purposes. The card plays at six different levels of difficulty, and has a "take back" and "suggest" mode of operation.

Organizer Chess lists for $109.99. Organizer Backgammon (OZ-8A02M) plays at three different skill levels, and includes "take back" and "help" features as well. The card retails for $49.99.

•A version of Quicken (the popular financial management program for the PC) is available as an IC card for the Sharp Wizard OZ-7000 and 8000 series organizers (9000-series support is in the works, apparently). Quicken transactions can be created on the Wizard and downloaded via the card to Quicken on the PC. The card is named the EZ-100, and lists for $110.

•Another couple of cards that some of you old-time Wizard owners might not have heard about include IQ Word (EZ-101), an 8000-series card which includes WYSIWYG word processing capabilities with type style selection and context-sensitive help. Data transfer to the PC is supported, allowing viewing and printing of documents and exporting to ASCII format. The EZ-101 retails for $259.99 but can be found selling at lower prices.

IQ Plus (EZ-102), also for the 8000-series only, is a multipurpose card, and it includes an A4 document editor/word processor, a user-definable database, a personal financial manager (including a checkbook facility with up to five accounts with separate budget categories), and an expression evaluator, and it can also operate as a programmable calculator. This card also lists for $259.99. ■

THE CASIO SF-M10 IS THE LEAST EXPENSIVE ORGANIZER WITH A BUILT-IN SPREADSHEET CAPABILITY.

IT JUST DOESN'T GET ANY BETTER THAN THIS!

486SLC/33MHz

- 486SLC/33MHz
- Mini Tower Case
- 4MB RAM
- 1.44MB FDD
- 170MB HD
- Super I/O Controller
- 256KB SVGA Card
- .39 SVGA Monitor (Shamrock)
- Spill Proof 101 Keyboard
- Mouse & Pad

$718

486DX/33MHz VESA LOCAL BUS

- 486DX/33MHz VLB (Intel)
- Mini Tower Case
- 4MB RAM
- 1.44, 1.22 FDD
- 170MB HD
- 32 Bit Controller
- 32 Bit Video Card
- .28 SVGA Monitor (Shamrock)
- Spill Proof 101 Keyboard
- Mouse & Pad

intel inside

$1090

486SLC2/66MHz VESA LOCAL BUS

- 486SLC/66MHz
- VESA Local Bus Motherboard
- 4MB RAM
- Mini Tower Case
- 1.44 FDD
- 170MB HDD
- 32 Bit VLB Controller
- 32 Bit Video Card
- 14" .28 SVGA Monitor
- Keyboard
- Mouse & Pad

$999

486SLC/66MHz MULTIMEDIA

- 486SLC/66MHz Multimedia
- Mini Tower Case
- 4MB RAM
- 1.44, 1.2 FDD
- 170MB HDD
- 32 Bit Controller
- 32 Bit Video Card
- x2 Panasonic CD ROM
- Media Concept 16
- .28 NI SVGA Monitor (Shamrock)
- Spill Proof 101 Keyboard
- Mouse & Pad

$1220

486DX2/66MHz

- 486DX2/66MHz (Intel)
- Mini Tower Case
- Vesa Local Bus Motherboard
- 4MB RAM
- 1.22, 1.44 FDD
- 340MB HDD
- 32 Bit VLB Controller
- 32 Bit VLB Video Card
- 15" SVGA Monitor
- 101 AT Keyboard
- Mouse & Pad

intel inside

$1325

NOTEBOOKS

486SLC/50MHz INEX

486SLC/50MHz CPU
4 Megs RAM (expandable to 8 Megs)
120 Meg Hard Disk
1.44 Floppy Drive
10" LCD VGA 640x480 Mono Screen
Internal FAX/Modem Slot
Mouse Adapter
Serial/Parallel/CRT Port
Removable NiCD Battery Pack
MS DOS 6.2

$1262

HYUNDAI

HYUNDAI 486 SUB NOTEBOOK

4 Meg RAM
120 Meg Hard Disk, 1 Floppy Drive
Vesa Local Bus
Multimedia Kit Capability
Sound Card Installed
Trackball Mouse
DOS 6.2, Windows 3.1
18 Month Warranty

$1560

HYUNDAI 486SLCC

4 Meg RAM
170 Meg Hard Disk, 1 Floppy Drive
Vesa Local Bus
Trackball Mouse
DOS 6.2, Windows 3.1
18 Month Warranty

$1999

MISCELLANEOUS

CASES

Mini Tower Case (200W)	$33
Mini Tower Case w/Door (200W)	$63
Medium Tower w/Door (230W)	$72
Full Tower w/Door (300W)	$94

KEYBOARDS

Korean Keyboard	$26
Focus Keyboard 9000	$54
Focus Keyboard 8000	$50
Focus Keyboard 7000	$46
Focus Keyboard 2001	$29
Spill Proof Keyboard	$14

MOTHERBOARDS

486SLC/33MHz w/CPU	$73
486SLC2/50MHz w/CPU & Math-Co	$205
486SLC2/50MHz w/CPU & Math-Co VLB	$212
486SLC2/66MHz w/CPU & Math-Co VLB	$297
486DX/33/66MHz ISA No CPU	$92
486DX/33/66MHz VLB No CPU	$98

MEMORY

1MB SIMM (70ns)	$38
4MB SIMM (70ns)	$163
256K SIMM	$13

MONITORS

Shamrock

.39, 14" SVGA Color	$194
.28 Interlaced, 14"	$224
.28 Non-Interlaced, 14"	$245

Viewsonic

4E	$254
6E	$278
15E	$352
15	$425
7E	$719
7G	$782
17	$929
21	$1754

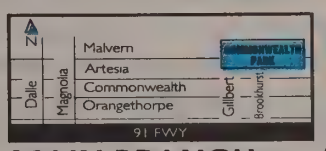
PRINTERS

EPSON

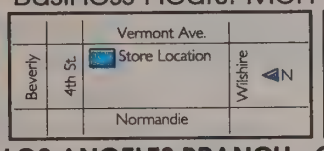
LQ 570	$243
LQ 1070	$378
Inkjet 300	$238
Inkjet 800	$288
Action Laser 1500	$679

Business Hours: Mon-Sat 10AM to 6PM

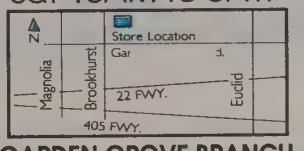
EZ Computer
PREMIUM GRADE SYSTEMS



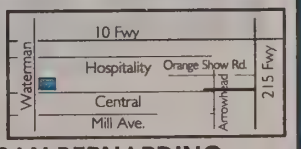
MAIN BRANCH
2009 Commonwealth Ave.,
Suites B&C
Fullerton, CA 92633
800-773-9077 or 714-447-3955
Fax: 714-447-3945



LOS ANGELES BRANCH
401 S. Vermont Ave., Suite 4
Los Angeles, CA 90020
Tel: 213-380-4431
Fax: 213-380-3974



GARDEN GROVE BRANCH
In the Arirange Plaza
9240 Garden Grove Blvd., Ste. 14
Garden Grove, CA 92644
Tel: 714-534-2530
Fax: 714-534-5229



SAN BERNARDINO
Business Hours: Mon-Fri 9am to7pm
Sat 9am to 5pm
738 S. Waterman Ave., Ste. A-22
San Bernardino, CA 92408
800-640-3373 or 909-885-1990
Fax: 909-885-6859

Prices subject to change at anytime & w/out notice. • All prices reflect cash discount

BitFax Professional— The New Fax Standard

BY ED KAHN

RESOURCES:

AcerNote 745C, $2,399
Acer America Corporation
2641 Orchard Pkwy.
San Jose, CA 95134
1-800-733-2237

BitFax Professional,$129
Bit Software, Inc.
47987 Fremont Blvd.
Fremont, CA 94538
(510)490-2928

Zoom/Voice FaxModem $229
Zoom Telephonics, Inc.
207 South St.
Boston, MA 02111
1-800-666-6191

I was slow to admit the advantages of a fax modem, but over the past year I've found that I do most of the faxing on my portable with fax software and a fax modem. When I create documents on the computer, it's simply easier to fax directly from the computer than print out the item and then fax it on a standalone machine. When I'm away from home, it's especially convenient.

Now that the price of fax modems has fallen dramatically and, at the same time, the quality of the software has improved, the scale is tipped even farther in the direction of buying the required hardware and software.

BITFAX: STATE OF THE ART

BitFax Professional goes way beyond the stripped-down fax software I have been enjoying. In fact, this new release from Bit Software incorporates a whole family of applications.

At the center of the package is superb fax software. In the old days, after I created a document with Windows-based software, I had to select the fax driver as my printer and then "print" to that driver. Now, if you are using Microsoft Word, AmiPro, or Excel, you can install an icon in the tool bar. Click the icon, and the document is automatically converted into a fax file ready for transmission. Type in the phone number, if it is not already in your fax phone directory, and your fax is on its way. Of course, you can still make a cover sheet, with or without a logo, and add a signature or other special designs you might want to insert into the basic document you are faxing. The complete file is stored in fax format in case you need to transmit it again.

LAPTOPS

This package will do everything you expected and then some. When you receive a fax, you can instruct the software to automatically print the fax. You can also direct it to convert the incoming fax into the format of your word processor so you can edit the text. I must warn you, however, that OCR (Optical Character Recognition) software still is not completely accurate; you'll certainly have to correct some characters after the conversion is done. In any case, this feature is convenient if you need to work with the received material, and it is usually a lot quicker than reentering the text through the keyboard.

This software will also now allow you to do simple editing right on the fax. You can circle items, draw on top of the fax with the mouse and add text in a variety of typefaces. While I seldom need this feature, it is certainly convenient, especially for filling out forms you receive and sending them back.

File management is improved with this new release. You can set up folders to hold faxes that should be grouped together. For instance, you might set up a folder for real estate related faxes, another for legal communications, and a third one for faxes from your branch office. It's easy to assign faxes that belong together to the same folder and to copy or move faxes between different folders.

The real strength of this new package, however, lies not only in its sophisticated fax capabilities, but also in the other things it can do. The most striking addition is a complete telephone answering system, which requires a fax modem with voice capability. Currently there are only a few on the market, but I suspect that there will be a wider choice in the months to come.

I tested the Zoom fax modem, which will transmit at up to 14,400bps. Unfortunately, this modem is not convenient to use with most newer portables as it is not miniaturized and also connects through a serial port. My serial port is generally taken up by a mouse. I assume there will be voice fax modems available on PCMCIA cards one of these days. In the meantime, this software and hardware is certainly a hint of things to come.

THE REAL STRENGTH OF THIS NEW PACKAGE, HOWEVER, LIES NOT ONLY IN ITS SOPHISTICATED FAX CAPABILITIES, BUT ALSO IN THE OTHER THINGS IT CAN DO. THE MOST STRIKING ADDITION IS A COMPLETE TELEPHONE ANSWERING SYSTEM.

The software allows you to set up separate mail boxes for each individual who receives calls or faxes. You can also instruct the software to dial your pager after you receive either a message or a fax. It is easy to retrieve both voice messages and faxes from remote locations.

Not long ago, telephone management through a computer required a board. Now, the whole operation is handled completely through software that will go on any computer running Windows. One problem with the voice manager is that it is virtually impossible to break in once the computer answers your phone. This will be corrected in the next release.

The final module of this amazing product is BitCom, a communications program that also runs under Windows. I welcomed this addition, as it makes sense to have a communications program as part of the fax

Continued on page 66

Copyright © 1994 by Ed Kahn. All rights reserved.

BINOMIAL SYSTEMS

957 Fairway Drive, Walnut, CA 91789
Tel: (909) 595-8293 • Fax: (909) 598-4609

Store Hours:
Mon-Fri: 9AM-6PM
Sat: by appointment

- Specialize in local & wide area networking
- On-Site service & training are available
- Customer leasing plan is available
- System consultation & installation
- Customize software programming
- Provides custom cable installation
- 2 in-house CNE to meet your networking needs

Novell Certified NetWare Engineer

NetWare Lite™

NETWORK CARDS

3COM

Ethernet 10 Base-T/Coax

3C509 Etherlink III ISA 16-bit	139.00
3C509 Etherlink III ISA 16-bit Combo	159.00
3C529 Etherlink III MCA 32-bit	259.00
3C579 Etherlink III EISA 32-bit	269.00

Token Ring

3C619 Tokenlink III 16/4 ISA 16-bit	493.00
3C629 Tokenlink III 16 MCA	529.00
3C679 Tokenlink III 16/4 EISA 32-bit	668.00

ADDTRON

Arcnet

ARC-120 ISA 8-bit Combo	55.00
ARC-220 ISA 16-bit Combo	75.00

Ethernet 10 Base-T

AE-200LT ISA 16-bit	55.00
AE-200TP ISA 16-bit (Nov. Cert)	75.00

Ethernet Coax

AE-200LB ISA 16-bit	55.00
AE-200STS ISA 16-bit (Nov. Cert.)	75.00

Ethernet Combo

AE-200LC ISA 16-bit 2-in-1 (Nov. Cert.)	75.00
AE-200JL ISA 16-bit 2-in-1 Jumperless	79.00

ARTISOFT

Ethernet 10 Base-T/Coax

AE-2 ISA 16-bit	215.00
AE-3 ISA 16-bit 3-in-1	259.00
Node Runner 2000 ISA 16-bit	189.00
Node Runner 2000 MCA	269.00
Node Runner 2000/A ISA 16-bit Combo	245.00
Node Runner/SI 2000 ISA 16-bit	109.00
Node Runner/SI 2000/A ISA 16-bit Combo	139.00
Node Runner/SI 2000/A MCA Combo	169.00

INTEL

Ethernet 10 Base-T/Coax

EtherExpress 16 ISA 16-bit	109.00
EtherExpress 16 ISA 16-bit Combo	135.00
EtherExpress 16 ISA Flash	132.00
EtherExpress 16 ISA Flash Combo	145.00
EtherExpress 16 MCA 32-bit	189.00

NOVELL

Ethernet 10 Base-T/Coax

NE2000 Plus ISA 16-bit	115.00
NE2000 Plus - 3 ISA 16-bit Combo	129.00
NE/2C MCA	265.00

Token Ring

NTR2000 TR ISA 16-bit	335.00

SMC

Ethernet 10 Base-T/Coax

Elite 16-Ultra ISA 16-bit	125.00
Elite 16-Ultra ISA 16-bit Combo	139.00
Ethercard Plus Elite16 ISA 16-bit	135.00
Ethercard Plus Elite16 ISA 16-bit Combo	155.00
Ethercard Plus Elite32 EISA 32-bit	657.00

NOTEBOOK ETHERNETS

Pocket

Addtron Pocket Ethernet	159.00
Xircom Pocket Ethernet III	299.00
Xircom Pocket Ethernet III Combo	329.00

PCMCIA

3Com Etherlink III 10 Base-T	269.00
3Com Etherlink IIi Combo	319.00
Xircom CreditCard	299.00
Xircom CreditCard Combo	329.00

NETWORK SOFTWARES

ARTISOFT

Artisoft Lantastic AI 6.0 Upgrade	35.00
Artisoft Lantastic AI 6.0	95.00

MICROSOFT

Windows for Workgroup 3.11 Add-On	65.00
Windows for Workgroup 3.11 Full Version	149.00
Windows NT 3.1	339.00
Windows NT 3.1 Advanced Server	1,039.00

NOVELL

Personal NetWare 1.0	75.00
NetWare Lite 1.1 w/DR-DOS	65.00
Novell DOS 7.0	79.00
NetWare 2.2 5 Users	505.00
NetWare 2.2 10 Users	1,095.00
NetWare 2.2 50 Users	1,995.00
NetWare 3.12 5 Users	695.00
NetWare 3.12 10 Users	1,595.00
NetWare 3.12 25 Users	2,295.00
NetWare 4.01 5 Users	899.00
NetWare 4.01 10 Users	2,025.00
NetWare 4.01 25 Users	2,975.00

NETWORK HUBS

ADDTRON

4 Port Arcnet Passive Hub	15.00
8 Port Arcnet Coax Active Hub	125.00
8 Port Arcnet Twisted Pair Active Hub	135.00
8 Port 10 Base-T Active Hub	259.00
16 Port 10 Base-T Active Hub	479.00

SMC

12 Port Elite 3812TP Active Hub	699.00

REPEATERS TRANSCEIVERS

Addtron 2 Port Coax/Thick Repeater	399.00
Addtron 4 Port Coax/Thick Repeater	559.00
Addtron Thick to Thin Transceiver	59.00
Addtron Thick to 10 Base-T Transceiver	59.00
Addtron Fiber Optic Mini Transceiver	CALL!

NETWORK PRINT SERVER

Eagle NPE400 Ethernet Combo	399.00
Intel NetPort II Ethernet	429.00
Intel NetPort Express XL Ethernet Combo	479.00

NETWORK UPS SYSTEMS

APC

Back UPS System 600	299.00
Back UPS System 900	415.00
Smart UPS System 600	409.00
Smart UPS System 900	599.00
Power Chute Plus Software	69.00

TRIPP-LITE

BC-600 UPS System Lan	289.00
BC-900 UPS System Lan	389.00
Omni 600 UPS System Lan	359.00
Omni 900 UPS System Lan	558.00
Power Alert Software	65.00

NETWORK CABLES & TOOLS

Cables

25 Feet RG58A/U Coaxial Cable	12.00
25 Feet RG62 Coaxial Cable	15.00
25 Feet 10 Base-T Twisted Pair (Level 4)	12.00

Connectors

Barrel Connector	2.00
50 Ω BNC Terminator	2.00
93 Ω BNC Terminator	2.00
T-Connector	1.75
RJ-45 Connector	.89

Tools

BNC Crimping Tool	25.00
RJ-45/RJ-11 Crimping Tool	29.00
RJ-45 Crimping Tool	19.00
RG58/62 Wire Stripper	25.00

TAPE BACKUP DRIVES

ARCHIVE

Python 2G Internal DAT	1,029.00
Python 2G External DAT	1,295.00
Python Turbo 4-8G Internal DAT	1,295.00
Python Turbo 4-8G External DAT	1,495.00

COLORADO MEMORY SYSTEMS

Jumbo 120 Tape Drive	129.00
Jumbo 250 Tape Drive	189.00
Trakker 250 Tape Drive External	375.00

SCSI CONTROLLERS

ADAPTEC

AHA-1522A (Adapter Only)	89.00
AHA-1542CF (Adapter Only)	219.00
AHA-1522AK Host Adapter w/Kit	139.00
AHA-1542CFK Host Adapter w/Kit	269.00
AHA-2842C VL-Bus Host Adapter w/Kit	315.00
AHA-2742T EISA Host Adapter w/Kit	399.00

ULTRA STOR

U14F ISA (Adapter Only)	199.00
U34F VL-Bus ISA (Adapter Only)	289.00
U34FK VL-Bus Host Adapter w/Kit	315.00
U24F EISA Host Host Adapter w/Kit	359.00

FILE SERVER HARD DRIVES

FUJITSU

1.08GB [M2694ESA] SCSI-II 10ms	959.00
1.75GB [M26525A] SCSI-II 12ms	1,599.00
2.1GB [M2654SA] SCSI-II 12ms	1,699.00

MICROPOLIS

1.05GB [2210] SCSI-II 10ms	995.00
1.7GB [2217] SCSI-II 10ms	1,299.00
2.4GB [1924] SCSI-II 11.5ms	1,659.00
3.6GB [1936] SCSI-II 11.5ms	2,399.00

QUANTUM

540MB [LP5540S] SCSI-II 12ms	575.00
1.8GB [1800S] SCSI-II 10ms	1,315.00

SEAGATE

1.05GB [ST11200N] SCSI-II 10.5ms	1,035.00
2.1GB [ST12550N] SCSI-II 8ms	2,250.00

MOTHERBOARDS W/CPU

EISA

486DX2-66 Mhz w/256K Cache	779.00
486DX-50 Mhz w/256K Cache	729.00
486DX-33 Mhz w/256K Cache	559.00

VL-BUS

486DX2-66 Mhz w/256K Cache	639.00
486DX-50 Mhz w/256K Cache	589.0
486DX-33 Mhz w/256K Cache	419.00
486SX-33 Mhz w/256K Cache	259.00

ISA

386DX-40 Mhz w/128K Cache	159.00
386SX-40 Mhz w/o Cache	99.00

COMPAQ NOTEBOOK

486SL 25Mhz w/4MB RAM
COMPAQ Track Ball
120MB Hard Drive
96BFax/24B Modem Built-In
PFS:WindowWorks
MS-DOS 6.0 & Windows 3.1

486/25 $1,799.00 | **486/25 Color $2,599.00**

NETWORK YOURSELF

Artisoft

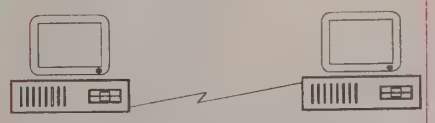
Lantastic 6.0	306.00

Microsoft

Windows for Workgroup 3.11 Full Version	379.00
Windows for Workgroup 3.11 Add-On	246.00

Novell

Personal NetWare 1.0	274.00
NetWare Lite 1.1	246.00
Novell DOS 7.0	284.00



• Peer To Peer Networking •

Complete package to connect 2 computers. Includes a peer-to-peer network operating system, 25-feet of coaxial cable and 2 16-bit Ethernet network cards.

We specialize in the following areas:

1. *Complete Novell NetWare Installation*
2. *Network Cable Installation*
3. *On-Site Service & Training*
4. *Network Maintenance Contracts*
5. *Customized Software Program*
6. *CNEs to serve your needs*

BSI FILE SERVER

486DX2-66 Mhz	**$1,695.00**
486DX-50 Mhz	**$1,645.00**
486DX-33 Mhz	**$1,495.00**
486SX-33 Mhz	**$1,395.00**

- Motherboard w/256K Cache
- 8MB of Memory, 70ns
- Monochrome Card
- 14" Monochrome Monitor
- Super I/O Card (2S, 1P, 1G)
- 340MB IDE Hard Drive
- 1.2MB Teac Floppy Drive
- Full-Tower Case w/250 Watts P.S.
- 101-Enhanced Keyboard
- 16-bit Novell Certified Network Card

BSI WORKSTATION

486DX-33 Mhz	**$799.00**
486SX-33 Mhz	**$716.00**
486SX-25 Mhz	**$635.00**
386SX-40 Mhz	**$465.00**

- Motherboard w/CPU
- 2MB of Memory, 70ns
- Monochrome Card
- 14" Monochrome Monitor
- Mini-Slim Case w/Power Supply
- 101-Enhanced Keyboard
- Novell NetWare Bootable Prom
- 16-bit Novell Certified Network Card

BSI VL-BUS SYSTEM

486DX2-66 Mhz	**$1,659.00**
486DX-50 Mhz	**$1,599.00**
486DX-33 Mhz	**$1,379.00**
486SX-33 Mhz	**$1,259.00**

- Motherboard w/256K Cache
- 4MB of Memory, 70ns
- VL-Bus Super VGA Card w/1MB
- 14" Super VGA Monitor, .28mm
- VL-Bus Super I/O Card (2S, 1P, 1G)
- 250MB IDE Hard Drive
- 1.2MB Teac Floppy Drive
- 1.44MB Teac Floppy Drive
- Hi-Resolution Serial Mouse w/Pad
- Mini-Tower Case w/200 Watts P.S.
- 101-Enhanced Keyboard
- MS-DOS 6.2 w/Document

BSI ISA SYSTEM

486DX2-66 Mhz	**$1,599.00**
486DX-50 Mhz	**$1,539.00**
486DX-33 Mhz	**$1,319.00**
486SX-33 Mhz	**$1,199.00**

- Motherboard w/256K Cache
- 4MB of Memory, 70ns
- Super VGA Card w/1MB
- 14" Super VGA Monitor, .28mm
- Super I/O Card (2S, 1P, 1G)
- 250MB IDE Hard Drive
- 1.2MB Teac Floppy Drive
- 1.44MB Teac Floppy Drive
- Hi-Resolution Serial Mouse w/Pad
- Mini-Tower Case w/200 Watts P.S.
- 101-Enhanced Keyboard
- MS-DOS 6.2 w/Document

* All prices are subject to change without prior notice

Government, School & Corporate P.O. are welcome!!!

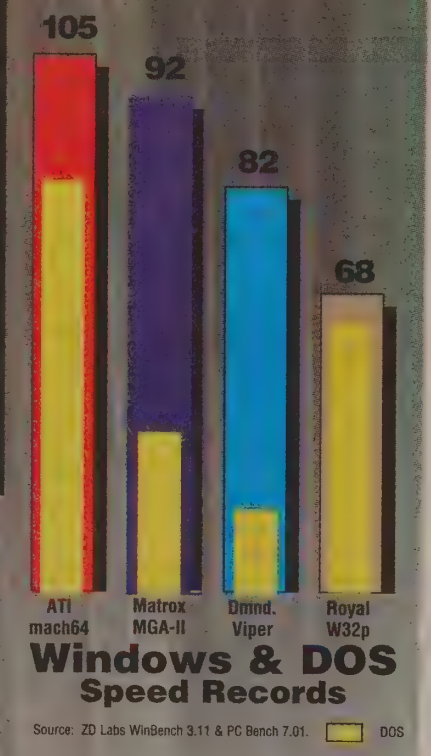
New!

ATI mach64 ... 105 WinMarks!

New Royal Systems set graphic records in DOS & Windows!

Our Design Pro and Media - 3X systems use the fastest graphics adapter available today, the new ATI ProTurbo mach64 with 2MB of fast 64bit VRAM. Windows runs at up to 105 WinMarks, and DOS at an amazing 7800 DOS marks, leaving competing systems in the dust!

WinBench 3.11 & PC Bench 8.01



the World's

DUAL-PENTIUM SYSTEMS

Our Best Buy!

Design Pro · 17" PCI & SCSI-2

PROFESSIONAL GRAPHIC DESIGN STATION

16/520, ATI mach64, 17"

- 4-PCI & 4-ISA bus master slots
- **16 MB** RAM, upgr. to 192MB
- 256K cache, upgradable to 512KB
- **520 MB** 11ms SCSI-2 HD, w/256K
- PCI SCSI-2 hard disk controller
- **17" flatscreen** 1280x1024 monitor
- **ATI mach64 64-bit PCI** graphic engine, 2 MB 64-bit VRAM, supports 1280x1024 res—*to 105 WinMarks!*
- 1.44 MB 3.5" floppy disk drive
- 101-key enhanced keyboard
- Roomy 7-bay tower, dual fans
- 2 Serial, 1 parallel, 1 game port
- High resolution serial mouse

486DX2-66	$2645
Pentium-60*	$3095
Pentium-66*	$3195
Pentium-90*	$3545
Dual-Pentium-90 upgrade	$1295

Royal Media · 3X PCI & SCSI-2 CD

ADVANCED MULTIMEDIA PROCESSING CENTER

ATI mach64, 3X NEC CD, Dig. Sound

- 4-PCI & 4-ISA bus master slots
- **8 MB** RAM, upgradable to 128MB
- 256K fast write-back cache
- PCI IDE hard disk controller
- **420 MB** 11ms IDE hard disk
- **15" KFC Digital flatscreen**, low radiation, 1280x1024—*Byte "Best Value" Award!*
- **ATI mach64 PCI graphics, 2MB, 1280x1024**
- **Triple-spin NEC SCSI-2 CD-ROM**, 195ms access, 450KB/sec
- **Royal's DSP 16bit sound card w/SCSI-2, ROM-wave** table, 2 spkrs
- **Voice-mail 96/24 fax modem**
- Both 1.2 & 1.44MB 3.5" floppy drives
- 101-key enhanced keyboard
- Hi-res mouse, 1P-2S-1G

486DX2-66	$2595
Pentium-66	$3145
Pentium-90	$3595

Fastest DOS & Windows

Royal's new PCI & VLB systems feature new graphics accelerators which deliver BALANCED acceleration in BOTH DOS and Windows... up to 105 WinMarks in WinBench 3.11 and 35 WinMarks in the new WinBench version 4.0!!! This is about 40% faster than the "fastest" cards you may have heard about previously! And, the ATI mach64 and Royal W32p cards also provide ultra-fast, uncompromising DOS record-making speed.

Fastest Multi-Media

Our new 2X and 3X CD drives will give you the data-transfer and access speeds you need for today's toughest, most advanced applications!

Business Media Pak

- **Double-spin CD-ROM, fast 250ms, 300KB/sec, Photo CD & multi-session compatible**
- **Orchid GameWave 16bit DSP sound card, 2 speakers, 4 CD titles**

Available with all systems!

$295

With Orchid SoundWave & Mic ... $395

Fastest Windows & DOS!

& ROYAL'S SUPERCHARGED PCI POWER-STATIONS!

Royal Media III PCI

EXPANDABLE, SPEEDY MID-RANGE M-MEDIA

8/420, Royal W32p PCI

- 4 Intel PCI bus-master & 4-ISA slots
- **8 MB** RAM, upgr. to 192MB (P5)
- 256K cache, upgradable to 512KB
- **420 MB** 12ms IDE HD, w/256K
- **PCI Enhanced-IDE "Type-3"** controller
- **15" flatscreen** 1280x1024 monitor
- **Royal W32*p*** PCI Windows accelerator, **2 MB** RAM, 1280x1024
- **Double-spin CD-ROM**, Photo CD compatible, 300 KB/sec
- **16bit Orchid Gamewave** sound with DSP, 2 stereo speakers
- 1.44 MB 3.5" floppy disk drive
- Choice of one software CD pak
- Hi-res mouse, 1P-2S-1G

486DX2-66 ..... **$1995**
Pentium-66* **$2545**

Triple-spin NEC 510 SCSI-2 CD-ROM & Spectrum 16 SCSI-2 sound $195

Designer - 15" PCI

VERSATILE, EXPANDABLE GRAPHICS STATION

8/420, Royal W32p, 15"

- 4-PCI & 4-ISA bus master slots
- **8 MB** RAM, upgr. to 192MB
- 256K cache, upgradable to 512KB
- **420 MB** 11ms IDE HD, w/256K
- **Enhanced-IDE PCI HD controller**
- **15" flatscreen monitor**, 1280x1024—*low radiation MPR-II*
- **Royal W32*p* PCI** accelerator, 2 MB, 1280x1024 res—***to 68 WinMarks!***
- 1.44MB 3.5" floppy disk drive
- 101-key enhanced keyboard
- Roomy 7-bay tower, dual fans
- 2 Serial, 1 parallel, 1 game port
- High resolution serial mouse

486DX2-66 ..... **$1745**
Pentium-60* **$2195**
Pentium-66* **$2295**

Upgrade to 17" flatscreen $295

Royal SCSI VLB & ISA

EXPANDS TO 7 SCSI-2 HD'S & PERIPHERALS

8/520, SCSI-2 HD on VL-Bus

- Pentium® Overdrive™ upgradable
- VESA Local Bus, energy-saving
- **8 MB** RAM, upgradable
- 256K fast write-back cache
- VL-Bus **Fast SCSI-2** HD controller
- **520 MB** 12ms SCSI-2 HD with cache
- 15" flatscreen monitor, 1280x1024
- **Royal W32*i*** Windows accelerator, **2 MB** RAM, 1280x1024, VLB
- 1.44MB 3.5" floppy disk drive
- 101-key enhanced keyboard
- 2 Serial, 1 parallel, 1 game port
- High resolution serial mouse

486DX-33 ..... **$1740**
486DX2-66 ..... **$1890**
486DX4-100 ..... **$2240**

Royal Pro VLB & ISA

AFFORDABLE, FAST VLB VIDEO & VLB HD

8/420, 15" Flatscreen

- Pentium® Overdrive™ upgradable
- VESA Local Bus, energy-saving engineering in main-logic circuitry
- **8 MB** RAM, upgradable
- 128K fast write-back cache
- VL-Bus IDE hard disk controller
- **420 MB** 12ms IDE hard disk
- **15" low radiation flatscreen**, 1280
- Royal VLB Windows accelerator, 1 MB RAM, 1280x1024
- 1.44 MB 3.5" floppy disk drive
- 101-key enhanced keyboard
- 2 Serial, 1 parallel, 1 game port
- High resolution serial mouse

486DX-33 ..... **$1490**
486DX2-66 ..... **$1640**
486DX4-100 ..... **$1990**

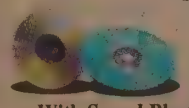
1.2 MB 5.25" floppy disk drive $45
Double-spin CD-ROM, Photo CD $165

True DSP 16-bit Sound

You'll enjoy full, rich studio-quality sound from our DSP "digital signal processing" 16-bit sound cards. One sound-session and you'll never be satisfied with our competitors' cheap, tinney sound-systems again! Ask your Royal salesperson for the details and a demonstration!

Power-User Media Pak

- **Toshiba 3401 Double-spin CD-ROM, SCSI-2, 200ms, 330KB/sec, Photo CD & multi-session**
- **Spectrum 16bit SCSI-2 sound card, 20 voices, 2 Speakers, 4 CD titles**



Available with all systems!

$475

With Sound Blaster ASP SCSI-2 ..... $625

Professional Media Pak

- **Triple-spin NEC 510 CD-ROM, SCSI-2, 200ms, 450KB/sec, Photo CD & multi-session**
- **Digital Signal Processing, SCSI-2 16bit sound card w/32-voices, 2 Speakers, 4 CD titles**

Available with all systems!

$595

Super-Sharp Displays

Royal's new 15" and 17" flatscreens use high-resolution .28mm dot-pitch flatscreens that reduce eye-strain, with edge-to-edge designs that provide up to 30% larger viewing areas. Most monitors are also now certified *low radiation & EPA Energy Star* rated to save your electric power costs.

All Royal's systems are made with quality components and burned-in for 72 hours prior to sale.

Call us for your own ***custom-system quotation*** — *today!*

Royal Electronics

Corporate P.O.'s Accepted!

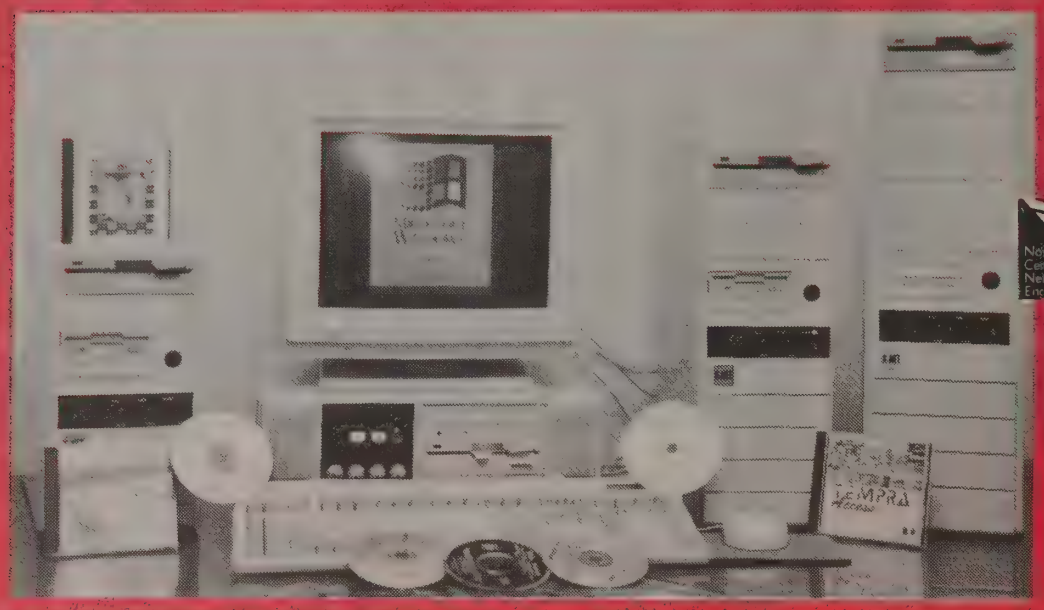
818-855-5077

FAX Orders 818/330-2717

1208 JOHN REED COURT
INDUSTRY CA 91745

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.
VISA-MC, add 3%. 1-Year Warranty, Parts & Lasbor.

Pay less & Get More, Best Price $ & Quality!!!



Service items include:
* Memory Upgrade, * System Upgrade,
* Trouble inspection,
* Novell Networking Service.

Financing Available
90 Days same as Cash

Please ask for Detail information

* *All price are based on C.O.D. Cash*
* *Prices are Subject to change without Notice*
* *Prices reflect 2% Cash Discount*
* *Add sales Tax no exception*

486 DX, 32 Bit VESA Local Bus System

NEW INTEL 486DX4 100 MHz INTEL CPU

Intel Pentium OverDrive Ready
486DX/486DX2/486DX4 MHz CPU *(Heat Sink with Fan)*
256KB External Fast write back Cache
4MB RAM at 70ns(expandable to 128MB)
5&1/4" & 3&1/2" Floppy Disk Drive
2 Serial/1Parallel/1 Game Ports
Middle Tower Case w/230W UL Power Supply
101 Enhanced Keyboard, Serial Mouse

345MB Hard Drive(expandable to 2GB)
32 Bit VESA LB FD/HD Drive Controller
32 Bit VESA LB Accelerated Card w/1MB
(16.7Million Colors,1280x1024, Exp. 2MB)
14" Super VGA, Non-Interlaced Monitor
(1024x768, .28mm dot pitch)

	Cash
486DX/33 MHz	$ 1289
486DX2/66 MHz	$ 1489
486DX-4/100 MHz	$ 1939

* Exp. to 8MB Memory	+$160	* Diamond STEALTH 24 VESA LB Video Card w/1MB	+$85
* 425MB IDE Hard Drive	+$75	* ORCHID FAHRENHEIT VESA LB Video Card w/1MB	+$95
* 545MB IDE Hard Drive	+$210	* Diamond VIPER VESA LB Video Card w/2MB RAM	+$295

* 14" VESA Standard, Non-Interlaced Super VGA Monitor, 1280x1024, 70Hz, .28dp +$35
* 15" Flat Screen, Non-Interlaced Super VGA Monitor, 1280x1024, 70Hz, .28dp +$120
* 17" Flat Screen, Non-Interlaced Super VGA Monitor, 1280x1024, 72Hz, .26dp +$525

486DX2/66 PCI VLB

486DX2/66 CPU w/Cooling Fan
AMI BIOS,4 PCI, 3VLB SLOT
256K External Fast Cache
1.2MB & 1.44MB Floppy Drive
2Serial/1Parallel/1Game Ports
Mid. Tower Case w/230W UL PS
101 Keyboard, Mouse

8MB Memory (Exp. 128MB)
425MB IDE Hard Drive
32Bit PCI SVGA Card w/2MB
32Bit VLB IDE/IO Controller
15" FLAT, SVGA, Monitor
(1024x768, .28dp)

$ 2195

386DX/40

386DX/40 CPU w/MB
AMI BIOS
128K External Fast Cache
1.2MB & 1.44MB Floppy Drive
2 Serial/1 Parallel/1 Game Ports
Mini Tower Case w/230W UL PS
101 Keyboard, Mouse

4MB Memory (Exp. 32MB)
212MB IDE Hard Drive
16Bit SVGA Card w/1MB
(HI-Color, Accelerator)
14" Super VGA monitor
(1024x768)

$ 898

Microsoft Compatible Mouse	$15
Microsoft New Shape Mouse	$45
386DX/40 MB w/CPU, 128K	$120
486DX/33 MB w/CPU,256K	$470
486DX2/66 MB w/CPU,256K	$580
1MB SIMM,70ns/each	$40
4MB SIMM,70ns/each	$159
Diamond Viper VLB w/2MB	$370
Diamond Stealth24 VLB w/1MB	$155
Diamond StealthPro VLB w/1MB	$260
Orchid Fahrenheit VLB w/1MB	$170
Colorado 250MB Tapebackup	$165
Conner 250MB Tapebackup	$160
Dual Speed CD ROM w/card	$215
ViewSonic 15E	$370
ViewSonic 15	$450
ViewSonic 17G	$845
ViewSonic 17	$995
ViewSonic 20	$1570
ViewSonic 21	$1825
MAG 15", 1564	$390
MAG 15", MX15F	$480
MAG 17", MX17F	$910

2400 MODEM, INT.	$35
9600FAX/2400MODEM, INT.	$45
14.4 FAX/MODEM, INT.	$125
14.4 FAX/MODEM, EXT.	$145
1.2MB Floppy Drive	$55
1.44MB Floppy Drive	$50
16Bit IDE/IO Card	$25
16Bit SVGA Card w/1MB	$75
32Bit VLB IDE/IO Card	$40
32BIT VLB SVGA Card w/1MB	$90
Mini Tower Case w/230W PS	$45
Mid Tower Case w/230W PS	$65
Full Tower Case w/250W PS	$90
14" Super VGA Monitor(IN)	$225
14" Super VGA Monitor(NI)	$245
KFC 15" 1280, Monitor(NI),.28	$350
KFC 17", 1280, Monitor(NI),.26	$750
250MB IDE Hard Drive	$235
345MB IDE Hard Drive	$285
420MB IDE Hard Drive	$335
540MB IDE Hard Drive	$445
101 Keyboard	$20
Focus 2001 Keyboard	$35

ALL SYSTEMS COME WITH ONE YEAR PARTS & LABOR WARRANTY

LAKE FOREST COMPUTER CENTER

TEL: (714)837-4284

23532 EL TORO RD. #7A
LAKE FOREST, CA 92630
(behind C & R Clothiers)
FAX:(714)837-4286

Business Hours:
M-F: 10:30-6,SAT: 10:30-4

Pre-Screening Telecommuters

Finding Strong Candidates For Your Company's Telecommuting Program.

BY ROBERT MOSKOWITZ

As telecommuting continues to proliferate through California, the United States, and the world, it's important to keep in mind that telecommuting works best for certain types of activities and certain types of people. Activities that require a hands-on physical presence and people who feel comfortable only working in groups are less likely to benefit from or succeed at telecommuting.

It's important to have everyone who'd like to telecommute go through a fairly-detailed screening process before they and their employer invest in the training, the workplace changes, and the equipment that might be needed to support the new telecommuter.

WHY TELECOMMUTE?

One of the first steps in screening a candidate is to get a full explanation of the reasons why this person wants to begin telecommuting. The wrong motivation, or mistaken expectations about telecommuting outcomes can create serious motivational and performance problems for the would-be telecommuter. Among the reasons offered by the candidate for telecommuting, you should find one or more of the following proven winners:

- To eliminate or reduce the time, cost, and difficulty of physically commuting to work.
- To allow longer concentration of important work projects.
- To allow greater flexibility in scheduling work time, and also in meeting special family needs, such as child- or parent-care, or as an alternative to temporary maternity leave.

WHY NOT TELECOMMUTE?

But just having the right reasons for wanting to telecommute is not enough. There can be many valid reasons why an eager and seemingly well-motivated candidate should not be allowed to telecommute. For a candidate to qualify, he or she should meet the following practical criteria:

- The candidate has enough room at home to set up a suitable workspace, or has an arrangement to telecommute from a suitable workspace in a commercially available site, in an "exchange" site approved by the company, or in a company owned facility near home. If at home, the workspace is preferably one with a door or at least a curtain that separates it from activities going on in other parts of the home while the telecommuter is trying to work.
- The candidate is willing and able to provide whatever furniture, equipment, resources, and services may be needed to establish a suitable workspace from which to telecommute, including a private workspace and perhaps a dedicated telephone line. Naturally, the more the company can or will contribute, the less must be provided by the telecommuter.
- The candidate has won acceptance of his or her telecommuting schedule from workplace colleagues, subordinates, and supervisors, at least enough acceptance so that he or she will receive adequate support when trying to work away from the office.
- The candidate has also won acceptance of his or her telecommuting schedule from family members and others living at home, at least enough acceptance so that he or she will receive adequate support and privacy when trying to work away from the office.

PERSONAL CHECKLIST FOR TELECOMMUTERS

If the motivation is well-founded and the practical situation is suitable for telecommuting, it's then appropriate to consider the individual's personal qualifications for adapting to this style of work.

In general, a person who will be successful at telecommuting shows elements of character and working style such as:

- Responsible and reliable, a person who has already established a pattern of delivering what he or she promises without falling back on lame excuses or recitations of extraordinary circumstances.
- Self-discipline and strong motivation to succeed both on the job and as a telecommuter.
- Self-sufficient, self-directed, and comfortable with the self-containment required of someone working in the more individual, isolated environment often experienced by telecommuters.
- An experienced self-starter who requires little or no direct supervision.
- Comfortable in an unstructured or minimally-structured work environment.
- Good communication skills, and strong relationships with many different people in the office or team environment.
- Able to "distance" him- or herself from the demands of family members and others at home while he or she is working as a telecommuter. Yet capable of maintaining a fair balance between work and family life over a long-period of time.

It's important to have everyone who'd like **to telecommute** go through a fairly-detailed screening process **before** they and their employer **invest in the training**, the workplace changes, and the equipment that **might be needed** to support the new telecommuter.

Copyright © 1994 by Robert Moskowitz. All rights reserved. *Robert Moskowitz is a business consultant based in Woodland Hills, CA, who writes frequently on productivity, office automation and technology. He is President of the American Telecommuting Association, a membership organization serving the needs of telecommuters and those who want to become telecommuters. He can be reached online at rmoskowitz@aol.com.*

JOB CHECKLIST FOR TELECOMMUTERS

Assuming the work environment is supportive of telecommuting, and the individual is personally a good candidate, the next important concern is that the work be suitable for telecommuting.

In general, work that can readily be accomplished by people working in the telecommuting mode is made up of:

• Reasonably discrete or separate projects, tasks, and activities.

• Individual projects, tasks, and activities that can be easily anticipated or accurately scheduled in advance.

• Relatively specialized projects, tasks, and activities that can be done away from the office.

• Individual projects, tasks, and activities that can be accomplished by an individual working alone, although they may require some communication with others over the telephone and other devices.

• Projects, tasks, and activities that generally result in some measurable results or specific deliverable.

SUPERVISORY CHECKLIST FOR TELECOMMUTERS

If all else checks out, it's critical to assess the support and motivation of the potential telecommuter's supervisor. Experience shows that without full cooperation from above, telecommuters have a very difficult time accomplishing their work and maintaining their role within the organizations.

In general, a supervisor who can effectively and successfully support a telecommuter is likely to be:

• Comfortable with supervision at a distance, or at least open to the potential advantages of supervising people who are not physically in the office every day.

• Flexible in the management of projects, and oriented more toward top-quality results than concerned with seeing people put in long hours.

• A good communicator and motivator who recognizes that an employee has a full life outside of work.

• Concerned with empowering his or her employees, and able to communicate trust through a coaching mentality.

THE TRIAL RUN

Once a candidate for telecommuting passes the pre-screening process, it's often advisable for them to convert to telecommuting at first on a trial or project basis. This lets everyone find out in practice how well the candidate can work as a telecommuter, without requiring the organization—or the candidate—to make a permanent commitment.

For a trial run, it's possible to pick a relatively isolated or unique project, the success or failure of which may not impact greatly on other aspects of the telecommuter's job. For example, writing a specific proposal, analyzing a specific contract, or designing a specific project plan are all relatively "isolated" projects the fledgling

Enjoy the Good Life

Become a CLA!!
(Certified LAN Administrator)

For a FREE Class Information Kit
Call (714) 962-1311

Windows for WorkGroups
Personal NetWare
NetWare 3.12
LANtastic

NetAmerica
9430 Warner Ave. ▲ Suite M ▲ Fountain Valley ▲ CA ▲ 92708

CITICOM COMPUTER

Rowland Heights
Garden Grove
Gardena

Computer Systems - Retail and Wholesale

1-800-500-CITI

486DX2-66

AMI BIOS
PENTIUM-READY MOTHERBOARD
3 VESA LOCAL BUS SLOTS
MEDIUM TOWER CASE
4 MB RAM, 70ns
340 MB FAST HARD DISK DRIVE
SVGA MONITOR .28 NON-INT
LOCAL BUS SVGA CARD 1MB
1.2 & 1.44 FLOPPY DRIVES
LOCAL BUS IDE CONTROLLER
2S, 1P & 1G PORT
101 ENHANCED KEYBOARD
HIGH RESOLUTION MOUSE

$1375

486DX-33

AMI BIOS
MINI TOWER CASE
4 MB RAM, 70ns
250 MB FAST HARD DISK DRIVE
SVGA MONITOR .28 INT
SVGA VIDEO CARD 1MB
1.2 & 1.44 FLOPPY DRIVES
IDE CONTROLLER
2S, 1P & 1G PORT
101 ENHANCED KEYBOARD
HIGH RESOLUTION MOUSE

$1145

486SLC2-66

IBM CPU WITH MATH-CO
VESA LOCAL BUS MOTHERBOARD
16K INTERNAL, 64K EXTERNAL CACHE
MINI TOWER CASE
4 MB RAM, 70ns
250 MB FAST HARD DISK DRIVE
SVGA MONITOR .28 INT
LOCAL BUS SVGA CARD 1MB
1.2 & 1.44 FLOPPY DRIVES
LOCAL BUS IDE CONTROLLER
2S, 1P & 1G PORT
101 ENHANCED KEYBOARD
HIGH RESOLUTION MOUSE

$1125

486DX-40

AMI BIOS
PENTIUM-READY MOTHERBOARD
3 VESA LOCAL BUS SLOTS
MINI TOWER CASE
4 MB RAM, 70ns
250 MB FAST HARD DISK DRIVE
SVGA MONITOR .28 INT
LOCAL BUS SVGA CARD 1MB
1.2 & 1.44 FLOPPY DRIVES
LOCAL BUS IDE CONTROLLER
2S, 1P & 1G PORT
101 ENHANCED KEYBOARD
HIGH RESOLUTION MOUSE

$1195

BAREBONE SYSTEMS

386SX-33.....185
386DX-40 WITH 128K CACHE.....225
486DX-33 WITH 256K CACHE.....455
486DX-40 WITH 256K CACHE.....455
486DX2-50 WITH 256K CACHE.....565
486DX2-66.WITH 256K CACHE.....625

ALL BAREBONE SYSTEMS INCLUDE CASE, POWER SUPPLY, 1 MB RAM, 1.44 FLOPPY DRIVE, IDE CONTROLLER WITH STANDARD PORTS AND 101 ENHANCED KEYBOARD.

MULTIMEDIA SPECIAL

OUR COMPLETE MULTIMEDIA KIT INCLUDES:

DOUBLE SPEED CD-ROM
16-BIT STEREO SOUND CARD
STEREO SPEAKERS
HEADPHONES
MICROPHONE

MULTIMEDIA ENCYCLOPEDIA
CHESSMASTER 3000
WORLD ATLAS
UNITED STATES ATLAS
SPACE SHUTTLE
MAVIS BEACON TEACHES TYPING
1993 GUINNESS RECORDS
MICROSOFT MULTIMEDIA PACK
10 GAME TITLES ON CD

ONLY $385

DISK DRIVES

1.2 FLOPPY DRIVE.....49
1.44 FLOPPY DRIVE.....39
120 MB HARD DISK.....165
170 MB HARD DISK.....195
245 MB HARD DISK.....219
340 MB HARD DISK.....269
420 MB HARD DISK.....345
540 MB HARD DISK.....435

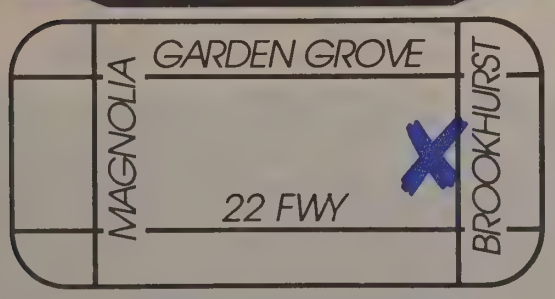
MONITORS

14" VGA .42 180
14" SVGA .28 1024x768.....225
SHAMROCK 14" SVGA .28 NI....249
NEC 3V .28 1024x768.....565
NEC 4FGe .28 1024x768.....725
OPTIQUEST 2000DX 15" DIG. CALL
MAG MX-15F .28 1280x1024...CALL
SONY CPD-1730 17" .26 DIG...995

CARDS / PRINTERS

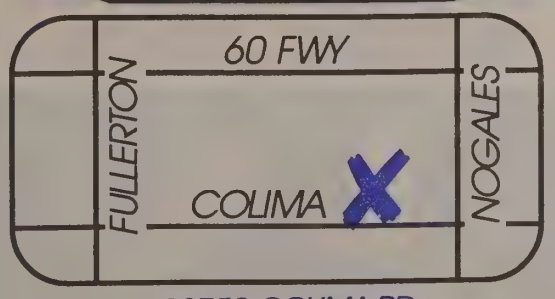
1MB SVGA VIDEO CARD.....65
1MB VLB SVGA VIDEO CARD.....85
1MB ORCHID FAHRENHEIT VLB...165
2MB DIAMOND VIPER VLB.....355
EPSON LQ-570+ 24PIN.....239
EPSON ACTION LASER 1500.....665
PANASONIC 2123 WITH COLOR...285
HEWLETT-PACKARD PRINTERS...CALL

GARDEN GROVE



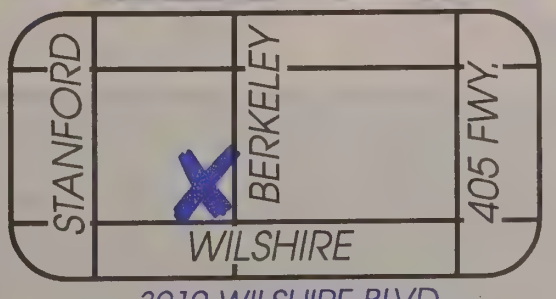
13161 BROOKHURST ST.
714-537-3399
FAX 714-537-2521

ROWLAND HEIGHTS



18759 COLIMA RD.
818-913-6555
FAX 818-913-5270

WEST LA



3019 WILSHIRE BLVD.
SANTA MONICA, CA 90403
310-453-2726 • FAX 310-453-6716

TOSHIBA

T3300SL
386SL/25, 2MB RAM
LCD VGA, 1.44 FLOPPY
80HD $999
120HD $1099

T1850C
386SX/25, 4MB RAM
COLOR VGA, MOUSE, WIN
80HD $1299
120HD $1399

T4400SX
486SX/25, 2MB RAM
LCD VGA DISPLAY
120HD $1299

T1900
486SX/20, 4MB RAM
Windows and Mouse!
120HD $1299
200HD $1499

T1910
486SX/33, 4MB RAM
Windows and Mouse!
120HD $1499
200HD $1699

T1950
486DX2/40, 4MB RAM
LCD VGA, 1.44
120HD $1799
200HD $2099

T1900C
486SX/20, 4MB RAM
LCD VGA DISPLAY
120HD $1849
200HD $2049

T1910C
486SX/33, 4MB RAM
COLOR VGA, 1.44
120MB $2099
200MB $2299

T1950CS
486DX2/40, 4MB RAM
COLOR VGA, Mouse
120MB $2399
200MB $2599

T1950CT
486DX2/40, 4MB RAM
ACTIVE MATRIX VGA
200MB $2895
320MB $3195

T4400C
486SX/25, 4MB RAM
Active Matrix Color
120MB $2399

T4500C
486SX/20, 4MB RAM
Active Matrix Color
120MB $2499

T4600
486SL/33, 4MB RAM
Mouse and Windows.
120MB $1899
200MB $2099

T4600C
486SL/33, 4MB RAM
Active Matrix Color!
200HD $4295
320HD $4695

T4700CS
486DX2/50, 8MB RAM
Color VGA, Sound
200MB $4099
340MB $4295

T4700CT
486DX2/50, 8MB RAM
Active Matrix Color!
CALL FOR BEST PRICE!

T6400DXC
486DX2/50, 4MB RAM
ACTIVE MATRIX VGA
200MB $3995

T6600DXC
486DX2/66, 8MB RAM
ACTIVE MATRIX VGA
NEW! NEW! NOW IN STOCK.

MACINTOSH

Quadra 610
68040 25MHz, 8MB RAM
160HD $1299
230HD $1599
230HD/CD $1895

Quadra 650
68040 33MHz, 8MB RAM
230HD $1999
230HD/CD $2199
500HD/CD $2399

Quadra 660AV
68040 25MHz, 8MB RAM
55MHz DSP
230HD $1499
230HD/CD $1799

Quadra 800
68040 33MHz, 8RAM
230HD $2299
230HD/CD $2599
500HD/CD $2799

Quadra 840AV
68040 40MHz, 8MB RAM
66MHZ DSP
230HD/CD $2799
1GIG HD/CD $3599

Quadra 950
68040 at 33Mhz
8MB of Ram
Tower Unit
Powerful and Fast.
400HD $2899

Apple Laserwriter LS
4ppm & 300dpi
$399

14" RGB
HI RESOLUTION
APPLE MONITOR
NOW ONLY $399

Powerbook Duo 250
4MB RAM, 200MB HD, 030 AT 33MHz
NOW ONLY $1699

Powerbook Duo DOCK
FPU, SUPERDRV, 2 NUBUS SLOT
NOW ONLY $399

Power MAC

6100/60	60MHZ RISC	$CALL
6100 8/250/CD	60MHZ RISC	$2099
6100 16/250/WIN	60MHZ RISC	$2299
6100AV 8/250/CD	60MHZ RISC	$2399
7100 8/250	66MHZ RISC	$2649
7100 8/250/CD	66MHZ RISC	$2949
7100 16/250/WIN	66MHZ RISC	$3099
7100AV 8/500/CD	66MHZ RISC	$3549
8100 8/250/CD	80MHZ RISC	$4049
8100 16/500/WIN	80MHZ RISC	$4549
8100AV 16/500/CD	80MHZ RISC	$4949
8100 16/1GIG/CD	80MHZ RISC	$5449

Apple Select 300
Affordable Laser Printing.
$495

Apple Select 310
PostScript, MAC or IBM!
$649

AST

Bravo Desktop
486DX/33, 4MB RAM
120MB HD, VESA, 1.44
101 KEYBOARD, P5 Avail.
AST 14" SVGA
$1249

AST Mini Tower
486DX/66, 4MB RAM, Accelerated
VGA (1MB), 240MB HD, VESA, 1.44, 1.2
101 KEYBOARD, P5 Avail., FAX/Modem
120MB Tape Backup, AST 14" SVGA
$1599

Power Exec Notebook
486SL/25, 4MB RAM,
200MB Removable Hard Drive,
1.44, Two PCMCIA SLOT
Trackball, Active Matrix Color
$2499

Bravo Notebook
486SX/25, 4MB RAM,
120MB HD, 1.44, PCMCIA SLOT
Built in Trackball
64 Gray Shade Mono VGA
$1199

Advantage Explorer
486SX/25, 4MB RAM,
120MB HD, 1.44, PCMCIA SLOT
Built in FAX/Modem, Mouse
Paper White VGA, Windows
$1399

COMPAQ AUTHORIZED

Contura 486SL 25c
4MB RAM, Color VGA
Windows, Mouse, FAX
120HD $1995

Contura 486SL 25cx
4MB RAM, Active Matrix Color
Windows, Mouse, FAX
120HD $2995

LTE LITE 486/33
4MB RAM, Active Matrix Color
Windows, Mouse
200HD $4499

AERO 486/33C
486/33MHz, VGA Color!
4.3 LBS!, PCMCIA,
250MB $Call

486SX/33 MT
Mini Tower, VLB BUS,
240MB HD, 4MB RAM
ONLY $1399

486DX2/50 MT
Mini Tower, VLB BUS
340MB HD, 4MB RAM
ONLY $1949

486DX2/66 MT
Mini Tower, VLB BUS
240MB HD, 4MB RAM
ONLY $2049

486DX2/66 MT
Mini Tower, VLB BUS
8MB RAM, 525MB HD
ONLY $2649

Deskpro XE50
486DX/50, VLB BUS
8RAM AND 170MB HD
ONLY $1799

Prosignia 66
486DX2/66, VLB BUS
8RAM AND 1GIG HD
ONLY $3795

Proliant 2000
486DX/66, NetFlex Smart
16MB RAM, 4 GIG HD
$12999

DESKPRO 386/20
386SX20MHz, 1.44
4MB RAM, 101 Keyboard
$299

Texas Instruments
486DX2/50 NOTEBOOK!
ACTIVE MATRIX, 4RAM, 200HD
FASTEST NOTEBOOK!
WINDOWS VER 3.1
$3295

NEC

4FGE 15"	$599
5FGP 17"	$1099
6FGP 21"	$2099

SONY

1430 14"	$549
1730 17"	$989
17SE 17"	$1149

LA COMPUTER CENTER
(310) 479-0999
12002 PICO
(In West L.A.)

IBM 750C THINKPAD
ACTIVE MATRIX COLOR
486SL/33 CPU
4MB RAM AND 340HD!
IN STOCK!

CANON
BJ200E $299
BJC600 $549
LBP430 $549

Prices subject to change without notice. All prices are cash discounted.

telecommuter can probably attempt as part of a trial run.

The trial run gives the new telecommuter the opportunity to make appropriate arrangements at home—particularly with family and with small children, and to test them out in practice. These arrangements should cover:

• Sharing with family members the nature of the telecommuting commitment, the goals and deadlines of the trial run project, and the days that one will be working away from the office.

• Working out with family members exactly what criteria to use in deciding whether or not to interrupt the telecommuter's work at home at a particular moment. For example, can a child expect Mom or Dad to stop working just to drive them to a friend's house? To make lunch? To answer a homework question? To change a diaper? With small children, it may be difficult to have a discussion or explain the nuances of when it is—and is not—appropriate to interrupt. But if the telecommuter is clear about these matters, young children and even babies will get the message through the consistency of the new telecommuter's actions and decisions. Telecommuters are generally not able to work productively and also take care of children—so separate arrangements should be made.

• Establishing rules about other family members using the telecommuter's workspace. Is the computer to be used for video games? Can someone take a pencil or tablet from the desk? Borrow the stapler? Suppose the regular home telephone line is busy and a teenager needs to make an urgent call? What if the business phone rings and the telecommuter is not around? Should someone answer? What should they say?

GOOD WORK HABITS

During the Trial Run, and afterwards of course, the telecommuter needs to know and utilize a set of work habits that have proven themselves to be most appropriate and effective in telecommuting situations. Briefly, these work habits include:

Good Pacing—It's important that the telecommuter maintain a steady rate of starting, moving forward on, and completing specific assignments and projects. Too slow, and productivity will drop. Too fast, and the telecommuter risks "burnout" or dissatisfaction that will prematurely end his or her career as a telecommuter. It's also important to take regular breaks throughout the day—perhaps one before starting work, one mid-morning, a lunch break, one mid-afternoon, and a post-workday break that serves as a psychological divider and refresher before the telecommuter launches into the responsibilities that generally appear at home around dinner-time and later.

Good Scheduling—Telecommuting successfully requires somewhat better planning skills than working successfully in the office. The telecommuter must arrange to have access to people and other resources at the specific times when he or she will need them for specific tasks and projects. By contrast, generally these people and resources are available almost any time to workers operating in the office.

Good Organization—In addition to scheduling, it's important for telecommuters to keep track of resources—phone numbers, paperwork, computerized files, and so forth—so the resources they need each day can be brought to the location where they're working. It' also important for telecommuters to have a particularly clear sense of what they are trying to accomplish, so they can focus steadily on a few important objectives and produce meaningful results supporters and skeptics alike can readily appreciate.

Good Self-Discipline—The temptations not to work are far greater for the telecommuter than for the office-bound worker. It takes a commitment to self-discipline to avoid such bad habits as: sleeping late, spending the day in your pajamas or nightgown, staying in bed or on the couch to work, letting the TV or radio distract you or absorb too much of your work time, taking too-frequent snack or meal breaks, and running errands or relaxing when you should be working.

Good Communication—Even though the telecommuter generally works separate and alone, he or she should make a strong effort to remain part of the team at the office. This means avoiding the temptation to switch tasks or re-structure projects without telling anyone else, particularly when other people are counting on you to do things a certain way or complete a certain task by a pre-arranged deadline. The successful telecommuter spends a lot of time and effort processing the day's events with team members—reviewing ideas and activities, considering plans and future options, consulting before making decisions, and reviewing past actions to judge their impact and success.

Good Flexibility—Despite the need for planning, telecommuters must also maintain a degree of flexibility—enough to change telecommuting days to accommodate an important meeting that will occur in the office, or to give up a week or two of telecommuting to meet special demands for office-time, or even to work extra hours as a telecommuter to meet a suddenly accelerated deadline for results.

TAC'S TELECOMMUTING 2001

May 5-6, 1994, are the dates for the Telecommuting Advisory Council's first national (in-person) conference, entitled: Telecommuting 2001. It's slated to be held at the luxurious Pointe Hill Resort on South Mountain, in Phoenix, AZ. To receive a registration brochure, call 602-759-7883, or write the TAC National Conference, 3239 E. Cottonwood, Phoenix, AZ 85044.

TELECOMMUTE '94 CONFERENCE

October, 1994, is the season for Telecommute '94, a high-level conference sponsored annually by Gil Gordon. In future articles I'll provide more information on scheduled speakers and the topics to be covered. Those interested in receiving word immediately can obtain an announcement and registration package by calling (908)329-2266 (or faxing: (908)329-2703). ■

Assuming the **work environment** is supportive of telecommuting, and the **individual** is personally a good candidate, the next important concern is that the work be suitable for **telecommuting.**

ADVANCED COMPUTER CENTER

SAGER THE PORTABLE POWER PEOPLE

The Best Source for Notebooks and Desktops.

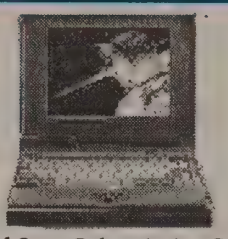
NP7500

Intel SL Enhanced 486 CPU 8K Cache
4MB RAM Exp. to 8/12/20/36MB
2.5" HD 250/340/520MB Removable
VLB 1MB Video RAM & IDE
PCMCIA Type III
Built-in Sound Card, Speaker, Mic
NiMH Battery
Microsoft DOS 6.21

250MB	Mono	Dual Scan Color	Active Color
486SX-33	$1675	$2205	$3205
486DX-33	1810	2340	3340
486DX2-66	1990	2520	3520
486DX4-100	2220	2750	3750

340MB HDD ..... +$100
520MB HDD ..... +$290
4/16MB RAM Card ..... +$
Docking Station ..... +$

NP9200

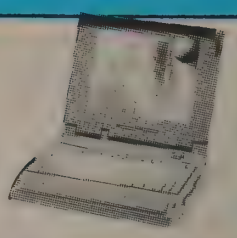


Intel SL Enhanced 486 CPU 8K Cache
External 128K Cache
4MB RAM Exp. to 8/12/20/36MB
Removable 2.5" HD 250/340/520MB
32 Bit VL-Bus Video 1MB RAM
PCMCIA Type IV Slot
Built-in Sound Card, Speaker, Mic
2 NiMH Hot-Swap Battery
25mm Center Trackball
Microsoft DOS 6.21

250MB	Mono	Dual Scan Color	Active Color
486SX-25	$1675	$2205	$3205
486DX-33	1860	2390	3390
486DX2-66	2040	2570	3570
486DX4-100	2270	2800	3800

340MB HDD ..... +$100
520MB HDD ..... +$290
4/8/12/16MB Card ..... +$210/400/
Docking Station ..... +$145

NP700



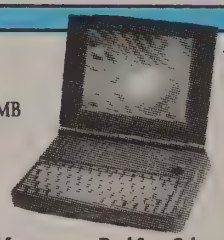
Intel 486 CPU w/8K Cache
4MB RAM Exp. to 8MB or 16MB
2.5" HD 120/340/520MB HD
3.5" FD 1.44 FDD
PCMCIA Type II
Microsoft DOS 6.21
10" Mono or 10" Color LCD
Built-in Trackball Mouse
Microsoft DOS 6.2

Local Bus

250MB HDD	Mono	Dual Scan Color
486SX-25	$1435	$1965
486SX-33	1475	2005
486DX -33	1625	2155
486DX2-66	1805	2335

120MB HDD ..... $
340MB HDD ..... +$100
520MB HDD ..... +$290
4, 12MB RAM Card $210/330
Docking Station $295

NP800



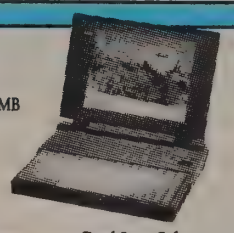
Intel 486 CPU w/8K Cache
4MB RAM Exp. to 8MB or 20MB
2.5" HD 120/340/520MB HD
Local Bus Display & IDE HD
PCMCIA Type III
10" Mono or 10" Color LCD
Built-in Trackball Mouse
Microsoft DOS 6.21

Local Bus

250MB HDD	Mono	Dual Scan Color	Active Color
486SX-33	$1530	$2060	$3060
486DX-33	1675	2205	3205
486DX2-50	1725	2255	3255
486DX2-66	1855	2385	3385

120MB HDD ..... $
340MB HDD ..... $
520MB HDD ..... $
4/16MB RAM Card ..... $
Docking Station ..... $

NP8200

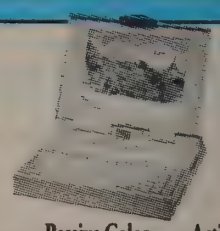


Intel 486 CPU w/8K + 128K Cache
4MB RAM Exp. to 8MB, 16MB or 20MB
2.5" HD 120/340/520MB HD
Local Bus Display
PCMCIA Type II
10" Mono or 10" Color LCD
Built-in Trackball Mouse
Microsoft DOS 6.21

250MB HDD	Mono	Dual Scan Color	Active Color
486SX-25	$1515	$2045	$3045
486DX-33	1690	2220	3220
486DX2-50	1740	2270	3270
486DX2-66	1870	2400	3400

120MB HDD ..... $
340MB HDD ..... $
520MB HDD ..... $
4, 12, 16MB RAM Card $210/320/
Docking Station ..... $

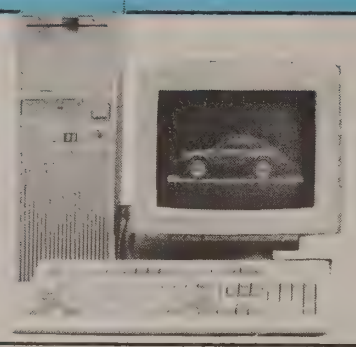
NP200



Intel 486 Serial CPU
4MB RAM Exp. to 16MB
3.5" HD 170/200/340/520MB HD
3.5" FD, 1.44 FDD, 2S, 1P
AT-Bus I/O for Docking
10" Mono or 8.5" Color LCD
Built-in Trackball Mouse PS/2
Microsoft DOS 6.21

250MB HDD	Mono	Passive Color	Active Color
486SX-25	$1330		
486DX-33	1530	$2100	$2930
486DX2-50	1550		
486DX2-66	1710	2280	3110

200MB HDD $20
340MB HDD $60
520MB HDD ..... $
4/12MB RAM Card $255/
Docking Station $100



ISA System

- 128K Cache
- 4MB RAM
- 1.44 FDD
- 170MB HDD
- SVGA Card 512K
- .28 SVGA Monitor Int.
- Mini Tower Case
- 230W Power Supply
- 101 Keyboard
- Mouse

Upgrade 486 Socket Ready!

VESA System

- 256K Cache
- 4MB RAM
- 1.44FDD
- 170MB HDD
- V/L Bus IDE I/O
- VL Bus SVGA Card 1MB
- .28 SVGA Monitor Int.
- Mini Tower Case
- 230W Power Supply
- 101 Keyboard
- Mouse

Upgrade Pentium Socket Ready!

ISA System		*VESA System*	
386DX-40	$825	486DX-33	$1095
486SX-25	870	486DX-40	1110
486DX-33	1025	486DX2-50 BEST BUY	1069
486DX-40	1040	486DX-50	1195
486DX2-50 BEST BUY	999	486DX2-66	1245
486DX2-66	1175		

GREEN PC AVAILABLE

Hard Drive Upgrade:
210MB ..... Add $
245MB ..... Add $49
345MB ..... Add $
420MB ..... Add $129
520MB ..... Add $199

Monitor Upgrade:
CTX 14" .28NI ..... Add $45
CTX 15" .28 NI .... Add $170

MONTHLY SPECIALS

PET-100 PCMCIA Ethernet LAN Adapter (2 in 1)	$215
PET-101 PCMCIA Ethernet LAN Adapter (10 Base T)	$185
PET-102 PCMCIA Ethernet LAN Adapter (10 Base 2)	$185
PFM-942 PCMCIA Fax/Modem (96/48/24 bps)	$135
PFM-144 PCMCIA Fax/Modem (14400 bps)	$260

MULTIMEDIA KIT

Silver Class — $99
Sound Gold 16 Sound Card Amplified Speakers

Gold Class — $329
Panasonic 562 Double Speed CD-ROM
Sound Blaster Pro 16 Deluxe, Amplified Speakers
5 CD Titles

Diamond Class — $529
Toshiba 3401B SCSI CD-ROM
Sound Blaster SCSI II 16 Deluxe
Joystick
Microphone
Amplified Speakers
5 CD Titles

ADVANCED COMPUTER CENTER

818 ♦795 ♦3939

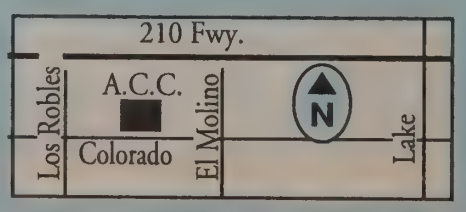
Fax: 818♦795♦0549

645 E. Colorado Blvd. ♦ Pasadena, CA 91101

3% Cash Discount!

MON-FRI
10:00AM - 6:30PM
SAT 11:30AM - 6PM
PARKING IN REAR

DISCOVER MasterCard VISA



We Welcome Competition!
We Will Beat Any Other Advertised Price!

LAN Packages for Small Businesses

LAN Packages For Basic File And Peripheral Sharing Services Without All The Bells And Whistles

BY PETER JOHN HARRISON

RESOURCES:

Coactive Connector
Coactive Computing Corp.
1301 Shoreway Rd., Ste. 24
Belmont, CA 84002
(415)802-1080

Simply Lantastic
Artisoft, Inc.
2202 N. Forbes Blvd.
Tuscon, AZ 85745
1-800-233-5564

MosesDOCK!
MosesALL
Moses Computer, Inc.
15466 Los Gatos Blvd., Ste. 201
Los Gatos, CA 95032
(408)358-1550

Copyright © 1994 by Peter Harrison. All rights reserved. *Peter Harrison, a San Mateo-based data communications and connectivity specialist, can be reached via USENET (peterh@well.sf.ca.us) or CompuServe (74017,1716).*

Most LAN packages are intended to meet the needs of medium- to large-size businesses. High-end packages, like Novell NetWare, are designed to manage dozens of users, connect to other LANs, even connect into the Internet. They're solutions for businesses that need the versatility and power of a high-end networking solution, but if all you have is a few PCs at your home or small business, they're expensive overkill. What small LAN users need is an all-in-one LAN package that provides basic file and peripheral sharing services without all the bells and whistles.

LANs for small businesses and homes need to provide LAN users with access to shared peripherals, like printers, CD-ROMs, and hard drives, but they have to be very easy to set up and maintain. Recently I had a chance to install and work with three different LAN-in-a-box solutions that would work well for a small business or home LAN. Each is a complete solution, with LAN software and hardware in one box, costs less that $200 per computer, and is easy to expand as the network grows.

COACTIVE CONNECTOR

The most unique package of the trio is Coactive Computing's Coactive Connector. Coactive's LAN gets a blue ribbon for easy-to-install hardware: you just plug their adapter into the printer port of a PC compatible and connect it to the next Coactive Connector with a phone cord. Installing the software is almost as easy, and the Coactive Connector comes with a well-written, 50-page manual titled *How to Hook This Stuff Up*. It took me about ten minutes to set up two computers using Coactive's connectors and software, the fastest and easiest LAN installation I've ever done.

Once the Coactive Connector and its software are installed, you're ready to share files and printers with other computers on your LAN. Each computer on the LAN has its own name, a special directory on the hard drive where "shared" files are stored, and access to an N: (for Network) drive. To make a file available to other computers on the network, just copy the file to the N: drive, where there are separate subdirectories for each computer's "shared" file directory. Once a file has been moved to the N: drive, any computer on the network can access and modify the file.

LANs for small businesses and homes need to provide **LAN** users with access to shared peripherals, like printers, **CD-ROMs**, and hard drives, but they have to be very easy to **set up** and maintain.

Mac users might recognize this networking scheme. Coactive is compatible with AppleTalk and PhoneNet, so you can network Macs and PCs with Coactive's system—a big plus if you have both Macs and PCs. Printing is easy too—you just use Coactive's software to select a printer attached to another computer, and print.

The Coactive Connector is straightforward and easy to use, but its simplicity comes at a price. Coactive's LAN won't let you share CD-ROMs or tape drives, and as networks go, it's slow. AppleTalk networks transfer data at 230Kbps, a small fraction of the speed of other network solutions and only twice the speed of a really fast modem. Still, if you have both Macs and PCs, or you don't feel comfortable opening your PCs up to install network cards, the Coactive Connector is a real winner.

SIMPLY LANTASTIC

Artisoft's Simply Lantastic is a scaled down version of their Lantastic/AI network, and it has a lot of the muscle of its larger brother. First, there are two versions of the Simply Lantastic package, one with network cards, one without, so if you know a little about network hardware, you can pick your own adapters (just make sure the adapter will work with "NDIS" drivers). For the rest of us, the Simply Lantastic Starter Kit comes with everything needed: two network adapters, a 25' LAN cable, and software for

THE STATE-OF-THE-ART SOLUTION TO INFORMATION STORAGE

Don't fiche anymore! Send those large print files to *intelligent* CD-ROM instead!

- Data & Records Archiving to CD-ROM
- Imaging, scanning, document management and OCR service
- Turn typed pages from any source into text files for use in word processing software
- Store thousands of pages of information on a single disc
- Turnkey solutions for in-house processing
- Create a database using all of your text files for faster/easier research and access
- Store graphics, text and/or photos
- Certified Netware Engineer (C.N.E.) support
- Custom-built Power P.C. Workstations

CD ARCHIVES

CALL US TODAY FOR A PROFESSIONAL CONSULTATION

(909) 394-5969

ABCOM COMPUTER PRODUCTS

DISCOUNT MEMORY OUTLET

MEMORY UPGRADE SPECIALISTS

WE WILL MEET OR BEAT ANY ADVERTISED PRICE

CALL 1-800 XLNT RAM (956-8726)

CUSTOMER & TECH SUPPORT (714) 373-6770

GUARANTEED

LOW PRICES QUALITY & PERFORMANCE

SORRY NO COMPROMISE, WE SELL MAJOR BRANDS ONLY

30 PIN SIMMS

SPEED	60 NS	70 NS	80 NS
1 X 9 (3 CHIP)	42.00	39.00	38.00
1 X 9 (9 CHIP)	49.00	48.00	47.00
4 X 9 (3 CHIP)	—	149.00	—
4 X 9 (9 CHIP)	159.00	155.00	150.00
4 X 8 (8 CHIP)		148.00	145.00

72 PIN

1 MB	65.00
2 MB	105.00
4 MB	165.00
8 MB	349.00
16 MB	640.00
32 MB	1,299.00

D-RAM

SPEED	70	80	10
256K X 1	2.75	2.50	—
256K X 4	5.95	5.50	—
1MEG X 1	4.95	4.75	3.95

CACHE RAM

SPEED	15NS	20NS	25NS
32 X 8	8.50	7.95	7.50
64K X 1	10.50	5.95	5.50
128K X 8	—	45.00	34.00
8K X 8	5.95	5.50	4.50

UPGRADE CHIP

486 SLC-25	486 DRX2-16/32
486 SLC-33	486 DRX2-20/40
486 DLC-25	486 DRX2-25/50
486 DLC-40	486 SRX2-20/40

C P U

PENTIUM 66
PENTIUM 60
486 DX 2-66
486 DX 33
486 DX 50
486 DX 2-50

PRINTER MEMORY. SPECIAL, LIMITED STOCK, CALL FOR PRICE

APPLE LASER WRITER II,IINTX,IINTX-J,IIf,IIg, 310,600,630
BROTHER HL-8D/8E/8V/10DV/10PS/10DPS/4/4PS/4V/4VE
CANON LBP 430/4SX/8II/8IIB/8IIT/8SX
EPSON ACTION LASER II/EPL 4000/EPL/4100/8000/6000/7000
HP DESKJET500/PLOTER/IIJ/IIDAIIP/IIP+/IIJ/IIID/IIIP/IIISI/4/4SI/M/MX/PM
IBM LEXMARK 10/R/A/L/P/12R/L/16L/5E/6/A/P/4019/E
KONICA LP 3110/3115/KYOCERA F800/F800A/F800T
OKIDATA OL 800/820/830,PLUS/840/850/810/400/400E/410E
PANASONIC KX P 4450/4420/4455/4451/4410/4430/4400/5400
SHARP JX-9400/9460/9600/PS/9660/9700/E/9500/PS/E/H

MATH-CO

CYRIX

83D87 (DX)	59.95
83S87 (SX)	57.95

ITT/ULSI

387DX	44.95
387SX	43.95

APPLE

MODEL	1MB	2MB	4MB	8MB	16MB
MAC CLASSIC/COLOR CLASSIC/LC/LCII, PERFORMA/200/400/405/410/430	65	105	175	350	—
PLUS,SE,IIC,IIS,LCII,IICX,IIVX,IIVI,PERFORMA	—	95	152	335	595
MACIIX,IIX	69	—	185	—	635
MACIIFX			245	—	725
PERFORMA 450/460/466/467/475/476/550	—		159	350	650
CENTRIS 610/650/660AV/LCIII/QUADRA 600's	49	95	155	338	625
QUADRA 800/840AV	—	95	156	345	650
QUADRA 700/900/950	—		155	—	650
QUADRA 660AV/610/650	—		—	350	650
POWERBOOK 140/145/170/160/165/180	—	105	175	365	
POWERBOOK 165C/180C	—		195	379	—

AST

MODEL	1MB	2MB	4MB	8MB	16MB
BRAVO 286/8/16,386SX16/20/25	-	108	—	350	—
BRAVO 3/25s/33s	-	110	165	345	645
BRAVO LC 486 BASED,4/25s/33/33s/50d/66d	-	110	170	350	—
ADVANTAGE 386/20/25, PRO 386SX25	—	108	—	350	—
ADVANTAGE PLUS/486 SERIES	—	110	175	355	—
ADVANTAGE PRO 486DX/33,SX25	—	118	185	385	670
PREMIUM 386/386c	75	—	175	—	—
PREMIUM 386/33T,SX 16,PREMIUM II 386SX	68		168	—	—
POWEREXEC 286/12,386SX/20/25/25c	75	—	198	—	—
POWEREXEC 3/25SL/SLC/EL	—	135	245	495	995
POWEREXEC 4/33 SL,COLOR,COLOR PLUS	—	—	195	—	850

NEC

MODEL	1MB	2MB	4MB	8MB	16MB
POWERMATE 386SX20/16/16e/20/25/325	-	125	—	365	—
POWERMATE 386/25s	—	—	195	350	—
POWERMATE 386/33i,486 SERIES,EXPRES	—	—	—	—	—
READY 425/433/EXPRESS/II 433ST/466ST	75	—	195	—	648
IMAGE 486/960 SERIES	—	—	195	364	665
PROSPEED 486SX/SXC/16/286	79	115	195	365	—

HEWLETT PACKARD

MODEL	1MB	2MB	4MB	8MB	16MB
VECTRA 386/33N/33NI	—	105	—	345	—
VECTRA 486M1,M,MX,486/25/33/50/66/N,NI,486U PC 486 VI	69	120	188	350	665

COMPAQ

MODEL	1MB	2MB	4MB	8MB	16MB
DESKPRO 286e/386/20/20e/25/25e/386s	85	-	205	-	-
DESKPRO 286/386Ns/20,SERIES1, SYSTEM PRO ,LT/486/33,PROSIGNIA PC SERVER 486/33/DX2 -,	69	115	179	365	650
,66/386/25M /33M, 486s/16/25/33/2-50/2-66 M ,SERIES,SYSTEM PRO/386,486 LT SERIES,XE ,433s/450/466					
DESKPRO 386/33,SYSTEMPRO 386/33,486/33L ,/25/50L/33,1020e,2040e,486/331e/680e	—	120	185	375	—
PROLINEA 4/25s/33/50/66/MT ,SERIES,CDSNET1/25s,PRESARIO 400/600/800 ,SERIES	66	125	185	198	665
PROLINEA 3/25s/25zs	-	120	185	375	—
I. TE386/20,LITE/20/25/25C/25E,4/25/25C/33C	95	130	229	395	725
CONTURA 3/20/25/25C,4/25/SCX/EX	—	115	185	350	895

IBM

MODEL	1MB	2MB	4MB	8MB	16MB
MOST PS/1 ADVISOR,CONSULTANT,ESSENTIAL, ,EXPERT,PRO OF 2133/2155/2168 SERIES	65	105	175	355	660
P/2 MODEL SX25/35/40/40/50Z/60/65/70/73/80/80-041					
486 90XP/VALUEPOINT					
325T/425SX/S/433DK/466DX					
2/S/425SX/433SX/433DX/450DX2/P60/D,RS6000,					
POWER STATION/POWER SERVER 220.	68	120	179	360	665
PS/2 LAPTOP,L40SX,NOTE182,N33SX,N33SX	—	135	205	366	—

TOSHIBA

MODEL	1MB	2MB	4MB	8MB	16MB
T8500/T1000SE/1000XE/1000LE	79	125	—	450	—
T1800/1850/1850C/2000/2000SX/2000SXE/2200SX ,3300SL/4400/6400/6600/1900/1950/4500/4600/	—	125	225	405	695
T1200XE/1600/3100SE/3200	—	129	188	—	—
T3100e/3200SX/3200SXC	—	115	210	—	—
T1900/1950/1950c/4500/4600/4700	—	—	245	450	895
T1500/5200/5200C	-	128	—	445	—

TEXAS INSTRUMENTS

MODEL	1MB	2MB	4MB	8MB	16MB
TRAVELMATE 2000/3000/3000WINX	95	115	—	—	—
TRAVELMATE 4000	—	—	225	—	1250

CALL FOR PRICES ON ALR,DEC,DELL,MAGNAVOX,PACKARD BELL,GATEWAY2000 NEC,TANDY,ZENITH,EPSON,DTK,QMS,SUN, COMPUTER MEMORY MODULES

GOVT,UNIVERSITY,SCHOOL,REPUTABLE C0,PURCHASE ORDERS ACCEPTED

ALL PRICES ARE SUBJECT TO CHANGE .SEND FAXES AT (714) 373-6768

15561 PRODUCER LANE, STE. I , HUNTINGTON BEACH, CA. 92649

SHIPPING & HANDLING CHARGES ARE NOT REFUNDABLE FOR RETURNS ON REFUSED PACKAGES WITHOUT PROPER RMA. NON DEFECTIVE PARTS.NO RETURNS ACCEPTED AFTER 30 DAYS OF SALES. NON DEFECTIVE RETURNED MERCHANDISE SUBJECT TO 20% RE-STOCKING FEE. ALL RETURNED MERCHANDISESHOULD BE IN ITS ORIGINAL UNUSED CONDITION AND SHOULD BE ACCOMPANIED WITH ORIGINAL INVOICE. WARRANTY PROVIDED FOR REPLACEMENT OF PARTS ONLY. ALL TRADE MARKS ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS

Coactive's **LAN** gets a blue ribbon for **easy**-to-**install** hardware:

two desktop units.

Installing the Simply Lantastic network cards was easy. After opening up my computer, all I had to do was find an open slot and install the card in it, then use Artisoft's special cable, which looks like a long extension cord for a set of headphones, to connect it to the next computer. Installing the hardware in my two desktop systems took me less than fifteen minutes.

The software was easy to install, too. But I did encounter a problem with my CD-ROM equipped system, and it took some hunting to find it. During the Simply Lantastic install, a line was added at the end of my AUTOEXEC.BAT file to load the network, but during the boot process, messages flew by on the screen complaining that my CD-ROM driver had been loaded, and Simply Lantastic needed to be loaded before my CD-ROM driver. A fast finger on the "pause" button when the message came up helped me diagnose the problem, and it only took me a few minutes to edit my AUTOEXEC.BAT file to fix the problem. Everything would have worked smoothly if the installation software had done the job for me.

Once up and running, Simply Lantastic was easy to use. After twiddling for a couple of minutes, I'd set up my LAN so that I could access my "big system's" disk drive, CD-ROM, and printer from my other system, which only has a hard drive, and I was able to back my small system's hard drive up using the big system's tape drive. To finish up my testing, I sent some email to myself using the basic email package that comes with Simply Lantastic.

The Simply Lantastic Starter Kit is a great package, but it does have one limitation that may not make it a good solution for your home or business. Currently, there is no Simply Lantastic adapter for laptops. Perhaps Artisoft will address this shortcoming in the months to come, but for now Laptops aren't part of the Simply Lantastic networking solution.

you just **plug** their adapter **into** the printer port of a **PC** compatible and **connect** it to the next **Coactive** Connector with a **phone cord.**

MOSESDOCK! + MOSESALL

If full LAN connectivity for your PC laptop is your priority, or if you need to control who on the LAN can access what files, Moses Computer's Small Business Networking products may be your answer. Using one MosesDOCK! desktop-to-laptop LAN package and a single-computer MosesALL desktop add-on, I was able to set up a three-node LAN, with two PC-compatible desktop systems and a laptop; share my "big" system's printer, CD-ROM, and large hard drive; and use the "big" system's tape drive to

ADCON COMPUTER SYSTEMS

2426 W. 8TH ST. # 114
LOS ANGELES CA 90057

TEL. (213) 380 - 0067
FAX. (213) 380 - 2013

REAL WORLD ACCOUNTING SOFTWARE
SOURCE CODE DEALER

RealWorld Corporation

MAS-90, SBT ACCOUNTING SOFTWARE
AUTHORIZED DEALER

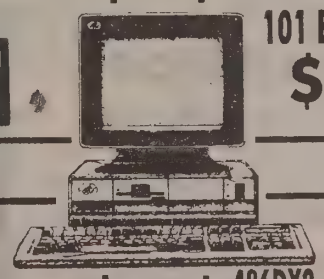
MAS90 MASTER ACCOUNTING

NOVELL
AUTHORIZED DEALER

NOVELL

SBT ACCOUNTING SOFTWARE
AUTHORIZED DEALER

SBT



386DX-40Mhz	486DX-33Mhz
128K Cache	256K Cache
AMD CPU	INTEL CPU
Mini Tower	Mini Tower
4MB RAM	4MB RAM
250MB Hard Drive	250MB Hard Drive
3.5" Floppy Drive	3.5" Floppy Drive
14" SVGA Monitor .39	14" SVGA Monitor .39
SVGA Card	SVGA Card
101 Enhanced Keyboard	101 Enhanced Keyboard
$769.00	**$1039.00**

486DX-40Mhz	486DX2-66Mhz
256K Cache	256K Cache
AMD CPU	AMD CPU
Mini Tower	Mini Tower
4MB RAM	4MB RAM
250MB Hard Drive	250MB Hard Drive
3.5" Floppy Drive	3.5" Floppy Drive
14" SVGA Monitor .39	14" SVGA Monitor .39
SVGA Card	SVGA Card
101 Enhanced Keyboard	101 Enhanced Keyboard
$1029.00	**$1179.00**

486DX2-66Mhz	486DX2-66Mhz (VEGA Mother Board
256K Cache	256K Cache
Intel CPU	Intel CPU
Mini Tower	Mini Tower
4MB RAM	4MB RAM (NEC)
250 MB Hard Drive	250 MB Hard Drive (QUANTUM)
5.25" Floppy Drive	5.25" Floppy Drive
3.5" Floppy Drive	3.5" Floppy Drive
14" SVGA Monitor .28	14" SVGA Monitor (VIEW SONIC 4E)
SVGA Video Card	SVGA Video Card (ORCHID)
101 Enhanced Keyboard	101 Enhanced Keyboard (FOCUS)
$1309.00	**$1579.00**

Free Mouse or Cooling Fan With Complete System Purchase

Price Subject To Change Without Notice

HARD DISKS

170MB	$179
210MB	$199
250MB	$219
340MB	$259
420MB	$279
520MB	$479
1.2GB	$CALL
1.5GB	$CALL

UPGRADES

FAX MODEM (9600/2400)	$45
FAX MODEM (14400/14400)	$115
CD-ROM	$179
SOUND CARD	$99
INTERNAL 250MB TAPE BACKUP	$155

MONITORS

Mono VGA 14"	$105
VGA 14"(.31)	$165
SVGA 14"(.39)	$185
SVGA 14"(.28)	$235
SVGA 14"(.28NI)	$255
SVGA 15"(.28NI)	$365
TATUNG, VIEW SONIC SONY, NEC	CALL

PRINTERS

HP 500	$289
HP 500C	$389
HP 550C	$489
HP 310 Portable	$329
HP 4L	$649
OKI OL400e	$509
OKI OL410e	$645
OKI OL810	$865

ADCON COMPUTER SYSTEMS (213) 380 - 0067

LEARN TO MASTER NETWORKING.

CNE SWEEPSTAKES WIN 2 FREE TICKETS TO HAWAII CALL FOR DETAILS

Novell Authorized Education Centers teach you the skills necessary to get the maximum performance from NetWare. The Evernet Education Advantage adds the finest instructors and best equipped classrooms. This combination gives you an outstanding learning experience...with your satisfaction guaranteed!

BECOME A

CERTIFIED NETWARE ENGINEER (CNE)

- Learn Service and Support
- Connectivity Classes
- Networking Technologies
- NetWare 3.1x and 4.0 Available
- 3.11 to 4.0 Updates
- Installation Workshop

SYSTEM ADMINISTRATOR

- Learn LAN Fundamentals
- NetWare 3.1x Administrator and Advanced Administration
- NetWare 4.0 Administrator and Advanced Administration

We Guarantee Our Training!

CALL TO REGISTER

800-447-3658

(LOCAL, CALL 310-642-0222)

EVERNET EDUCATION SERVICES
Los Angeles • San Francisco • Sacramento •

Novell Authorized Education Center

LOS ANGELES AIRPORT: 5777 West Century Boulevard, Suite 1695, CA 90045
SACRAMENTO: 9851 Horn Road, Suite120, CA 95827
SAN FRANCISCO: 100 Spear Spear Street, Suite 340, CA 94105

COMPLETE PLOTTING & BLUEPRINTING

HEWLETT PACKARD
AUTHORIZED DEALER

ARTISOFT INC.

NOVELL

AUTOCAD® CADVANCE

PLOTTERS

FREE!

FREE LEGS WITH EVERY DESIGNJET 200 THRU MARCH 31ST STARTING AT $2950

PLOTTING

Monochrome from 85¢/SF
Color CAD From $2.00/SF
Color Renders From $5.00/SF

REPRO

Bluelines From 8¢/SF

FREE Pick-up & Delivery
(Limited Area, Call for Details)

WMBE SERVICES

- CADD Drafting
- CADD Plotting Mono & Color
- Blueprinting
- Xerox
- Shacoh
- Hardware
- Software
- Supplies

All Brands Supported

Lease and Financing Available!
Trademarks belong to their respective owners.

NEW LOWER PRICING ON HP VECTRA!

LOGICACHE COMPUTERS, INC.
IBM COMPATIBLE MANUFACTURER/DISTRIBUTOR
SALES & SERVICE — CADD CONSULTING

TEL: (714) 855-1211
FAX: (714) 855-3892
MODEM: (714) 855-0387

HOURS: M-F: 9 am to 6 pm
Sat & Sun: By Appt. Only
22691 Lambert St.,Ste. 505
El Toro, CA 92630

BUSINESS SOLUTIONS

Coactive is compatible with AppleTalk and PhoneNet, so you can network Macs and PCs with Coactive's system.

back up the other two computers. I was also able to control what files each user on my LAN could access and change.

Moses Computing's Network Operating System can be set up to provide read-write, read-only, or password protected access to individual directories on each machine, so households with inquisitive children can keep the kids out of the financial records, and small businesses can make price lists available without having to worry about them being accidentally changed or erased. Simply Lantastic and the Coactive Connector can only provide full access to files or none at all.

I really like Moses Computing's LAN hardware and software. Of the three products reviewed here, theirs is very robust and the cheapest, but installing their system took much more time and technical knowledge than was required for Coactive Connector or Simply Lantastic. I had to resolve interrupt and DMA channel conflicts to get the MosesALL internal adapter to work with my "big" system Sound Blaster card, and once again, I had to troubleshoot and manually edit the AUTOEXEC.BAT file to get the LAN and CD-ROM drivers to work together. I also had to call the Moses Computing technical support people (who were very helpful) to get answers on how to set Windows up to work with the LAN, a subject not covered well in their manual.

There is something to like about all three of these networking products. To find the right solution for your needs, you need to think about what kinds of computers you want to network, your level of computer know-how, and the environment you'll be using your LAN in, then compare your needs to the features offered by each of these products, and make a choice. Once everything is set up, you'll be surprised at how easy networking can be. ■

Low Priced & Quality You Can Trust.

CALL FOR DEALER PRICES

COLOR NOTEBOOK 486SLC-33

- 4MB RAM
- 120MB HD
- Passive Matrix Color

$1499

3 MONTHS SAME AS CASH!

HOT DEALS!

IBM 486SLC2-66MHz SYSTEM

- IBM 486SLC2-66MHz Motherboard
- 4MB RAM
- 245MB Hard Drive
- 1.2 and 1.44 Floppy Drive
- Fax/Modem

$999

486SLC-33MHz SYSTEM

- 486SLC-33MHz Motherboard
- 4MB RAM
- 245MB Hard Drive
- 1.2 and 1.44 Floppy Drive
- Fax/Modem
- SVGA Monitor
- Mini Tower Case
- 2S/1P/1G
- 101 Keyboard
- 1MB SVGA Card

$899

UMAX COLOR SCANNER

- Full Page, Flat Bed
- 16.7 Million Colors
- 1200 dpi
- SCSI Interface Card w/Cable
- Adobe Photo Shop LE for Windows

$699

LASER PRINTERS

OKIDATA OL400E

- 4ppm, 300dpi page printer, publication quality output
- 44 bit mapped fonts
- HP IIP Plus Compatible
- Serial & Parallel Interface
- Small Footprint
- 5 Year Print Head Warranty

$475

OKIDATA OL410E

- 4 ppm, 600dpi page printer
- 44 bit mapped font
- PCL 5
- 2MB RAM up to 5MB RAM
- 5 Year Print Head Warranty

$610

OKIDATA OL810* w/Toner

- 8ppm page printer
- 300 x 1200dpi
- PCL5
- 42 fonts with toner

$875 or $40/mo.

*Laser Printer Class

PRISM 386DX-40

- 386DX-40 Motherboard
- 128K Cache
- 2MB RAM
- 1.2 & 1.44 Floppy Drives
- 130MB Hard Drive
- 2S/1P/1G
- SVGA Monitor .39 dpi
- Mini Tower Case w/200W PS
- 101 Enhanced Keyboard

$699
or $27/Per Month

PRISM 486DX-33

Cyrix VESA Local Bus

- 486DX-33 Cyrix CPU
- VLB Motherboard, 256K Cache
- 1.2 & 1.44 Floppy Drives
- 4MB RAM
- 170MB Hard Drive
- SVGA Monitor .28 NI
- 1MB, 32 Bit VLB, SVGA Card Upgradable to 2MB
- 2S/1P/1G
- Mini Tower Case
- 101 Enhanced Keyboard

NEW!

$999
or $42/Per Month

PRISM 486DX-33

VESA Local Bus

- 486DX–33 Motherboard Intel CPU
- 256K Cache
- AMI BIOS
- 1MB 32 Bit VLB SVGA Card
- 4MB RAM
- 1.2 & 1.44 Floppy Drives
- 130MB Hard Drive
- 2S/1P/1G
- SVGA Monitor Non-Interlaced .28
- Mini Tower Case w/200W PS
- 101 Enhanced Keyboard

$1050
or $45/Per Month

PRISM 486DX2-66

VESA LOCAL BUS

- AMI BIOS
- 486DX2-66MHz w/256K Cache
- 4MB RAM
- 420MB Hard Drive
- 1.2 & 1.44 Floppy Drive
- 1MB SVGA Card 32 Bit VLB
- 32 Bit IDE Controller
- 14" SVGA 0.28, Non-Interlaced Monitor
- Full Tower Case w/250W PS
- 101 Enhanced Keyboard

$1399
or $65/Per Month

EPSON

LX-810	$169
FX-870	269
FX-1170	359
LQ-570	239
LQ-870	449
LQ-1070	619
Stylus 800 w/$50 rebate	289
EPL-8000	825
Action Laser 1000	575
Action Laser 1500	659
ES600C Scanner	1125
ES800C Scanner	1395

HARD DRIVES

MAXTOR

130MB	$175
170MB	185
340MB	275
540MB	410

WESTERN DIGITAL

200MB	$199
340MB	265
420MB	285
540MB	399

SEAGATE

130MB	$185
200MB	Call
260MB	220
1.2GB & 2GB	Call

QUANTUM

170MB	$185
270MB	Call
540MB	410
1.08GB SCSI	749
2.0GB	Call

MOTHERBOARDS

386SX-40MHz w/CPU	$65
386DX-40MHz w/CPU	99
486SX-25MHz w/CPU	145
486DLC-33MHz w/CPU	155
486DX-33MHz, ZIF, VLB	345
486DX2-66MHz ZIF VLB	499
IBM 486SLC2-66MHz w/IBM CPU	255
IBM 486SLC2-66MHz VLB	299

MULTIMEDIA

CD ROM DRIVE

Mitsumi, 280ms Double-Spin	$160
Panasonic 563B, Double Speed	185
NEC 55 SCSI Double Speed	199
Toshiba 3401B 200ms, Double Speed	325

MULTIMEDIA KIT

Double Speed CD ROM, Cardinal 16 Bit, Sound Card, Labtec Speakers w/AMP Booster, 5 CD Titles $375

SOUND CARDS

CRL SB SCSI ASP	$199
CRL SB MCD 16 Bit	169
CRL SB SCSI II 16 Bit	210
Media Vision Audio Pro Spectrum 16 SCSI	120

486SLC-33 SUBNOTEBOOK

- 4MB RAM, 120MB Hard Drive
- 1.44 Floppy Drive
- 64 Gray Scale, 10" Display
- Built-in Trackball
- 5.1 Lbs. w/Battery Pack
- Battery Pack, Adapter, Carrying Case, DOS

$1099

HP SCANNER/FAXES

HP ScanJet IIC	$1014
HP ScanJet IIP	689
HP Fax 310	1095

SPECIALS

FLOPPY DRIVE

TEAC 1.2MB	$48	TEAC 1.44MB	$37
CHINON 1.2MB	42	CHINON 1.44MB	35

VGA CARD

256K VGA	$27	Trident 1MB	$60
Cirrus Logic 1MB	55	Diamond Stealth	Call

MEMORY

1MB X 9 (3 Chip)	Call	4MB X 9 (9 Chip)	Call

MONITOR

SVGA .39	$185	SVGA NI 15"	$320
SVGA NI 17"	585		

MODEM

Fax/Modem 96/24	$40	14.4 Fax Modem	$109

TAPE BACK-UP

Colorado 250MB	$159
Conner 250MB w/Tape Cartridge	Call

We Will Beat Any Advertised Price!

Hours: Mon.-Fri. 8:30 am - 6:00 pm

Micro America, Inc.

1009 S. Placentia Avenue, Fullerton, CA 92631

714•578•0094

Fax: (714) 578-0095

Prices and specifications subject to change without notice. Micro America is not responsible for typographical errors.

Power Macintosh™ is Here!

PSI 24/96 PowerBook Internal Fax Modem

$29

Installation Available Only $40
Limited to stock on hand

1/2 Off

Any Training Class

Take any class in our training facility during the months of April or May and we will take 1/2 of the price, or let you bring a friend free!

Coupons valid thru May 31st 1994

Your Choice Free

Alert !
Snooper 2.0
PowerMerge

Limited to stock on hand
Coupons valid thru May 31st 1994

Free CD-Rom

Your free CD-ACCESS disk contains over $200 worth of free software, PLUS demonstrations of over 100 of the latest Macintosh titles!

Monitor and keyboard extra

$1,699 8/160

Runs Windows and Mac Software!

Why is Everyone Shopping at Mac Universe?

- **Authorized Service Department**
  Quick turnaround for repairs
- **State of the Art Training Facility**
  Classes start at $39.95
- **Knowledgeable Staff Since 1989**
- **Over 2,000 Software Titles in Stock**
- **Hundreds of Peripherals in Stock**
- **Networking & Mac to PC Specialists**
- **Leasing & Financing Available**

The Original Macintosh SuperStore™

Mac Universe™

19100 Ventura Blvd • Tarzana, CA 91356

800-974-4 MAC / 818-609-7012

Authorized Reseller

Open 7 Days!

10-6 Monday-Friday
10-5 Saturday • 12-5 Sunday

Apple, the Apple logo, Power Macintosh and Macintosh are registered trademarks of Apple Computer, Inc

A Short History Of Money-Making Ideas

UNIX As A Stealth Force In The Marketplace

BY BENNETT FALK

Frequent observers of this space already know that the UNIX industry is a Big Thing. We're accustomed to measuring the industry's progress from year to year by looking at the UNIX-related revenues of a handful of very large corporations: IBM, Sun, HP, AT&T, Novell, Oracle, Sybase, Informix, and SCO. These are companies that make lots of money from the UNIX operating system itself, from bundling UNIX with their hardware, and from producing application software to run under UNIX.

There is more to the business of making money with UNIX than these large companies represent. If the giants of the UNIX industry succeed, it is only because their customers have some idea about how to make an investment in UNIX profitable. Over the last twenty-five years UNIX entrepreneurs have had some curious ideas.

Early versions of UNIX (between 1970 and 1979) were largely a convenience for the research community at Bell Laboratories and assorted universities. UNIX provided tools for interactive software development that were certainly superior to punch card systems. If you were willing to learn a programming language for document formatting, something like word processing facilities were also available in early UNIX. Bringing these two disparate functions together in a single computing environment promised a new era of office automation.

Had Bell Labs been a hotbed of commerce, early UNIX could have challenged the desktop dominance of the IBM Selectric Typewriter, but product positioning was not Bell Labs' strong suit, and UNIX spent most of its first decade as a kind of think-tank curiosity.

UNIX

Copyright © 1994 by Bennett Falk. All rights reserved.

TIMESHARING: MUTATE AND PROSPER

Between 1980 and 1982 microprocessor technology made UNIX systems affordable outside the research community. The first commercial idea was simply to offer the general public access to the same kind of computing resources the research community enjoyed. Users would pay only for the resources they used. The modern timesharing service was born with carrels for drop-in users and dial-in lines for users with modems. In the machine room, a "super-micro" of some sort with perhaps 8MB of memory served as many as thirty users stumbling for the first time through the mysteries of hierarchical directories and the UNIX Shell.

No one was sure exactly what the general public would be able to do with this sort of computer access, but computers had captured enough of the public imagination to make the idea of UNIX access appealing for a while. This appeal was short-lived. Application software for UNIX systems was still largely undeveloped, and the general public wasn't exactly teeming with software developers. The personal computer revolution made computer ownership relatively inexpensive and provided more (and more easily used) application software.

Curiously, commercial timesharing survived the indifference of the general public to the notion of renting access to a UNIX computer. Timesharing services took a cue from personal computer bulletin boards and began to promote UNIX systems as a vehicle for communication. This was a good move: people were reluctant to rent computer time for the privilege of using nroff or ls or vi, but they would happily subscribe to services that let them socialize.

At first the new generation of timesharing businesses were stand-alone conferencing systems (like the WELL of eight or nine years ago). More recent systems (like the WELL of today or Netcom) emphasize their connections to global networks. Today the timesharing notion of renting time on someone else's computer is stronger and more profitable than ever.

THE DAWN OF RDBMS

The UNIX industry's second wave of business opportunities came in the mid-1980s (roughly between 1983 and 1986) with the development of relational database management systems (RDBMS) for UNIX. The UNIX database systems were easier to use than existing mainframe systems. They also provided multiuser access to a common pool of data, and this was an advantage the personal computers of the time could not easily erase.

The manufacturers of RDBMS software (Oracle and Informix in the early 1980s, and Sybase somewhat later) became big companies. A host of smaller businesses got very big providing database consulting services.

Where the timesharing businesses had attempted to market UNIX access to the general public, the RDBMS boom was aimed primarily at corporate customers. Before UNIX became commercially viable and before the proliferation of personal computers, corporate data processing was done in data processing departments that did nothing but process data and take care of the Very Large Computer on which the data resided.

Personal computers proved to be a resource that data processing departments were unable to control, and when UNIX database management systems became available, the authority of the centralized data processing department eroded even further. Business units, departments, and local workgroups of all sorts used the new database technology of the mid-1980s to take control of their own data. Managers of relatively small workgroups in large companies began to act like entrepreneurs as they shopped for cost-effective ways to

LOOK NO

Open Sundays
Quality Computer
818/960-1933

YOUR SINGLE SOURCE FOR

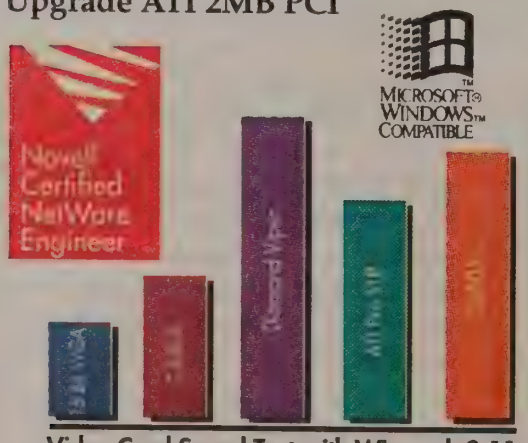
MONTHLY SPECIAL

420MB IDE HD	$279
1.08GB SCSI-2	$749
PCI Matrox 2MB SVGA	$399
U.S. Robotic 14.4K Fax/Modem	$129

PCI Express Station

- 3 PCI Slots
- 256K Cache
- Intel Processor
- 8MB RAM
- 1.2MB & 1.44MB Floppy Drive
- 420MB 13ms IDE Hard Drive
- Built-in IDE Controller
- 2 Serial, 1 Parallel, 1 Game Port
- Express PCI SVGA 2MB
- 15" 1.28mm NI Color SVGA Monitor
- 101 Enhanced Keyboard
- Medium Tower Case
- Free Hi-Res 1450 DPI Mouse
- CPU Cooling Fan

Pentium P5-60MHz	**$2495**
PCI 486DX2-66MHz	**$1995**
DOS & Windows Package	$95
Upgrade to PCI Diamond Viper 2MB	$220
Upgrade to 540MB IDE	$120
Upgrade to 17" SVGA NI Monitor	$349
Upgrade ATI 2MB PCI	$150



Video Card Speed Test with Winmark 3.11

VESA Win Station

- 256K Cache, 4MB RAM Intel Processor
- Pentium Overdrive Socket Ready
- 1.2MB & 1.44MB Floppy Drive
- 250MB, 13ms IDE Hard Drive
- Fast VESA LB IDE Controller (50x Faster than Standard Controller)
- Super VESA LB Win Accelerator Video (16.8M Colors & Up to 1280 x 1024)
- 14" SVGA Color Monitor NI Flicker-Free
- 2 Serial, 1 Parallel & 1 Game Port
- 101 Enhanced Keyboard
- Desktop or Mini Tower Case
- Free Hi Res 1450 DPI Mouse

Intel 486SX-33MHz	**$1049**
Intel 486DX-33MHz	**$1219**
AMD 486DX-40MHz	**$1179**
486DX2-66MHz	**$1359**
IBM 486SLC2-66MHz 64K No ZIF	**$1159**
DOS & Windows Package	$95
CPU Cooling Fan	$10
Upgrade 15" NI Flat Screen	$140
Upgrade 420MB	$65

Super Fast MultiMedia (VL-BUS)

BEST BUY!

- 256K Cache, 4MB RAM, Intel Processor
- Pentium P24T Ready Socket
- Double Speed CD ROM Player
- 16 Bit Sound Card, 2 Mini Speakers, 7 CD Titles, Microphone
- 1.44MB & 1.2MB Floppy Drive
- 250MB, 13ms IDE Hard Drive
- Fast VESA LB IDE Controller (50x Faster than Standard Controller)
- 14" SVGA Color Monitor NI Flicker-Free
- Super VESA LB Accelerator Video (16.8M Colors & Up to 1280 x 1024)
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- Desktop or Medium Tower
- Free Hi Res 1450 DPI Mouse

Intel 486SX-33MHz	**$1419**
Intel 486DX-33MHz	**$1579**
AMD 486DX-40MHz	**$1539**
486DX2-66MHz	**$1719**
DOS & Windows Package	$95
CPU Cooling Fan	$10
Upgrade 15" NI Monitor Flat Screen	$140

SCSI Multimedia Station

- 256K Cache, 8MB RAM Intel Processor
- Pentium P24T Ready Socket
- 1.44MB Floppy Drive
- 540MB 13ms SCSI Hard Drive
- Fast VESA LB SCSI Controller (50x Faster than Standard Controller)
- **ATI Ultra Pro 2MB VRAM (80x Faster than Standard VGA Card)**
- **15" VESA Color SVGA NI Monitor 1280x1024**
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- Medium Tower Case
- Toshiba 3401B SCSI CD-ROM Pro Audio Spectrum 16 Bit, 4 CD Titles, 2 Mini Speakers
- Free Hi-Res 1450 DPI Mouse

Intel 486DX-33MHz	**$2649**
Intel 486DX2-66MHz	**$2789**
DOS & Windows Package	$95
CPU Cooling Fan	$10
Upgrade to 17" SVGA NI	$349

AMD/IBM/Intel Station

- 256K Cache 4MB RAM
- 1.2MB & 1.44MB Floppy Drive
- 210MB IDE Hard Drive
- 16 Bit SVGA 1MB
- 14" SVGA Color Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- Mini Tower or Desktop Case
- Free Hi-Res 1450 DPI Mouse

AMD 386DX-40MHz 128K	**$909**
Intel 486SX-33MHz	**$999**
Intel 486DX-33MHz	**$1159**
AMD 486DX-40MHz	**$1119**
486DX2-66MHz	**$1299**
DOS & Windows Package	$95
CPU Cooling Fan	$10
Upgrade 14" NI Color Monitor	$25
Upgrade 250MB Hard Drive	$20

Terms and Conditions: All UPS shipping charges are nonrefundable. 14 day money back guarantee. 15% restocking charge before 30 days. After 30 days no refund. Printers and monitors warranty by manufacturer. CD titles and software are not refundable after opened. Prices are reflective of cash and check discounts.
Prices subject to change without notice.

FURTHER

NETWORKING, MULTIMEDIA AND BEYOND

MOTHERBOARDS W/CPU

PCI Pentium P5-60MHz w/256K	$1199
EVLB HVL 486-33DX 256K Cache	459
EVLB HVL 486-66DX2 256K Cache	579
PCI 486-33DX 256K Cache	535
PCI 486-66DX2 256K Cache	685
VLB 486-33DX 256K Cache	369
VLB 486-50DX 256K Cache	535
VLB 486-66DX2 256K Cache	499
VLB 486-33SX 256K Cache	229
ISA 386-40DX 128K AMD CPU	139
ISA 486-40DLC 128K Cache Cyrix CPU & Math Co.	189
VLB 486-66SLC2 IBM w/CPU & Math Co. 64K	295
Upgrade to ZIF Socket	Add $20

VIDEO CARDS

MGP	$15
VGA 512K 16 Bit	45
Trident SVGA 1MB 16 Bit	65
Oak SVGA 1MB Accelerator Hi Colors 16 Bit	65
Diamond Speedstar Pro 1MB DRAM VLB	115
Diamond Stealth 24 1MB VLB	145
Diamond Stealth 32 VLB 2MB DRAM	215
Diamond Stealth 32 PCI 2MB	215
Diamond Viper 2MB VLB	345
PCI Diamond Viper 2MB SVGA	385
ATI Ultra Pro 2MB VLB	325
ATI Ultra Pro 2MB EISA	399
ATI Ultra Pro 2MB PCI	329
STB 1MB VLB (S3-805)	135
Orchid Fahrenheit 1MB VLB	155
Orchid Fahrenheit VA 1MB VLB	165
Genoa 1MB VLB	120
Genoa 2MB PCI	189
ET4000 W32 SVGA 1MB VLB	135
PCI Matrox 2MB SVGA	399
Trident 9400 SVGA 1MB VESA	79

HARD DRIVES

170MB IDE	$189
210MB IDE	215
270MB IDE/250MB	229
340MB IDE	269
420MB IDE	279
520MB IDE	399
1.05GB IDE	930
340MB SCSI II	299
540MB SCSI II	429
1.2GB SCSI II After Format	1299
1.05GB SCSI II After Format	749
2.0GB SCSI II	1535
250MB IDE Removable HD	390
340MB IDE Removable HD	490

ADD ON CARDS

AT I/O (2S, 1P, 1G)	$18
RS 232 Port	15
Parallel Port	12
Game Port	12
UART 16550 AT I/O High Speed	35

FLOPPY DRIVES

1.2MB	$48
1.44MB	40
2.88MB	85
1.2/1.44MB On One FDD	125

CONTROLLERS

XT/AT 2FD	$25
IDE 4FD/2HD 16 Bit	35
IDE I/O (2S,1P,1G) 16 Bit	18
IDE 2FD/2HD 16 Bit	15
IDE 2FD/2HD Caching 16 Bit	120
Ultrastor 14F SCSI	250
Ultrastor 24F EISA SCSI	360
Ultrastor 34F VLB SCSI	275
Adaptec 1522BK (Bare)	95
Adaptec 1522BK w/Kit	149
Adaptec 1542BK w/Kit	259
Adaptec 1542BK (Bare)	219
Adaptec 2742 w/Kit, EISA SCSI	370
Adaptec 2742 (Bare), EISA SCSI	325
Adaptec 2842 SCSI VESA	325
VLB IDE w/I/O 4HD/4FD	49
VLB IDE 2S-1P-1G w/2 UART 16550 Comp.	65
VLB IDE 2S-1P-1G w/2 UART 16550 Comp. Controller 2.88MB	65
VLB IDE I/O 2HD/2FD	29
Promise VLB IDE Cache (Exp. to 16MB) 0K	139
Bus Logic VLB SCSI	275
VLB IDE/SCSI Combo	139

MONITORS

Mono VGA 14"	$100
14" SVGA Interlaced .39	200
14" SVGA Interlaced .28	235
14" SVGA .28 (Full Screen) NI	255
CTX 1461 14" Multiscan .28	285
CTX 1560LR 15" DIG, LR .28	375
CTX 1760 17" .28	645
Optiquest 15" DIG .28	375
Viewsonic 6E 14"	295
Viewsonic 15	445
Viewsonic 15E Non Digital	365
Viewsonic 17	949
Viewsonic 17G	769
Viewsonic 20	1499
Viewsonic 21	1729
MAG 1564 15"	365
MAG MX15F 15"	459
MAG MX17F 17"	859
MAG DX-15F Green	429
MAG DX-17F Green	749
NEC 3V 15"	495
NEC 4FGE 15"	655
NEC 5FGP 17"	1399
NEC 6FGP 21"	2290

KEYBOARDS

Chicony 5311	$25
Chicony 5181	33
Chicony 5591 w/Trackball	59
Focus 2001	38
Focus 9000	55
Keytronic 101 Keys	35
NMBS 101 Keys	39
Fujitsu K4700	45

ETHERNET CARDS

NE2000 Compatible Combo	$55
Intel EtherExpress	109/139
3COM EISA Ethernet	270
Ethernet Novell	139
CNET 32 Bit EISA	320
Intel 32 Bit EISA (Coax)	490
AMI 32 Bit VLB SCSI/Ethernet Card	459
Artisoft AE-2 Starter Kit	489
Artisoft AE-2 Adapter	200
Ethernet Concentrator 8 Ports	250
Ethernet Concentrator 12 Ports	459

MOUSE

Hi-Res 3 Button Serial	$12
Zenix 3 Button Serial	15
Logitech Serial/Bus	58/72
Logitech Trackball Serial	78
Microsoft Serial/Bus	45/65
Generic Trackball	25

TAPE BACK UP DRIVES

Colorado 250MB Int.	$169
Colorado 250MB Ext. Tracker	329
Conner 250MB Int.	159
Conner 525MB SCSI Int.	449

MODEMS

2400 Baud Int./Ext. Modem	$29/65
96/24 Int./Ext. Fax Modem	50/95
14.4 Fax/Modem Int./Ext.	119/159
Intel/US Robotic 14.4 Fax/Mode Int./Ext.	155/179

CD TITLES

5 Star Games	$18
11 Million Businesses' Phone Directory	25
The Animals	19
Arthur's Teacher Trouble (MPC)	25
Barron's Profiles of American College	25
Battle Chess	19
Beauty and the Beast	19
The Best of Micro Prose (4 Games)	29
Bibles & Religion	19
Carmen San Diego	19
Challenge Pack, Game	25
Chessmaster 4000, Game	29
CIA World Fact Book	15
Classic Tales Talking	25
Compton's Encyclopedia	49
Corel Draw 3.0	65
Dagger of Amonra, Games	29
Dinosaur Adventure (DOS)	25
Dr. Fun Pak	15
Dr. Games Shareware (154 Games)	15
Encyclopedia	49
Family Doctor	25
Food Analyst	29
Great Cities	19
Goldilocks & the 3 Bears	25
Guinness Disk of Records 1993	25
Interactive Storytime V.1,2,3	25
Int'l Business Atlas	25
Jones in the Fast Lane	25
Just Grandma & Me	28
King Quest V	19
Language of the World	29
The Last Dinosaur Egg, Game	25
Latraviata (X)	25
Library of the Future	29
Macmillan Dictionary for Children	25
Mantis Experimental Fighter	19
Mayo Clinic Family Health Book (MPC)	24
Microsoft Bookshelf, 7 Titles	49
Microsoft Works	49
National Parks' Multimedia Family Guide	25
Newsweek Interactive	19
Oceans Below	25
Oriental Hot Night (X)	25
Original Hits, Sing Along	20
Playing Language - French (DOS)	25
Playing Language - German (DOS)	25
Playing Language - Japanese (DOS)	25
Playing Language - Spanish (DOS)	25
Playing Language - English (DOS)	25
Publish It 2.0 (DOS)	25
Reference Library	15
Return to Zork, Game	30
Secret of Monkey Island (DOS)	19
Secret Weapons of Luftwaffe	19
Seventh Guess	38
Sleeping Beauty	19
So Much Shareware III (DOS)	19
Space Adventure (DOS)	25
Space Quest IV	19
Space Shuttle	25
Sport's Best (3 in 1) (DOS)	19
Sports Illustrated Almanac	15
Star Wars Chess, Game	30
Stellar 7	15
T-15 Strike Eagle IV, Game	25
Talking Jungle Safari	25
Time Almanac	19
Travel Companion	25
USA Wars: Desert Storm	28
US History	19
Who Killed Sam Rupert? (DOS/MPC)	25
Willy Beamish	19
Wing Commander/Ultima VI	25
Wiz-Pak 6 Pak	15
Z-Co. Quest, Game	30

HUNDREDS OF TITLES AVAILABLE—CALL!

MULTIMEDIA PACKAGES

Add Any Package to the System of Your Choice.

Package #1.....$328

Mitsumi CD ROM IDE 300KB/250ms 16 Bit Sound Blaster MCD Free Encyclopedia CD Microphone

Package #2.....$379

Panasonic CR562 CD ROM IDE Double Spin 300KB/320ms 16 Bit Sound Blaster MCD 7 CD Titles, 2 Mini Speakers, 1 Microphone

Package #3.....$499

Toshiba 3401B SCSI CD ROM 300KB/200ms w/16 Bit Pro Audio Spectrum, 4CD Titles, 2 Mini Speakers

CD ROM

Mitsumi FX-001M Int. D-Spin w/Int. Card 290ms	$169
NEC CDR 55 SCSI	219
NEC CDR 510 3x Spin Int. OEM	369
NEC 3xi Spin Int. CDR 500	519
NEC 3xe Spin Ext. CDR 600	615
Panasonic CR-562B Int. D-Spin 290ms	169
Toshiba 3401B Int. SCSI 200ms	329

Sound Cards

16 Bit Pro Audio Spectrum/Studio	$129/219
Sound Blaster 16 MCD w/o ASP w/ ASP	$169/199
Sound Blaster 16 SCSI II w/o ASP w/ ASP	$189/209
2 Mini Speakers/2 Speakers w/Amplifier 80W	$15/69

All Systems Carry a One Year Parts and Labor Warranty/72 Hour Burn-in Time Before Shipping/Government & Corporate PO's Welcome/14 Day Money Back Guarantee/Prices Subject to Change Without Notice
Prices reflect cash or check discount.

QUALITY COMPUTERS, INC.
13001 Ramona Blvd., #C • Irwindale, CA 91706
Sales (818) 960-1933 • Tech Support (818) 960-6093 • Fax (818) 337-5025
Hours: Monday–Friday 9:00–6:00, Saturday 10:00–4:00, Sunday 10:00-4:00

KINGSLEY COMPUTER, INC.
15711 E. Valley Blvd. • City of Industry, CA 91744
Sales (818) 369-2295 • Tech Support (818) 369-0224 • Fax (818) 369-2195
Business Hours: Mon–Fri 9:00–6:00

Novell

Novell Education Academic Partner

Take the Novell Classes You Need For the Careers of the 90's

CERTIFIED NETWARE ENGINEER (CNE)
CERTIFIED NETWARE ADMINISTRATOR (CNA)
ENTERPRISE CERTIFIED NETWARE ENGINEER (ECNE)

- 3-12 Month Programs
- Now Offering ECNE and CNA (v3.1x or 4.0)
- Drake Authorized Testing Center
- Low Tuition Rates
- Choose Our Certificate or Diploma Programs

"Novell Education Academic Partner"

Mt. Sierra College

350 N. Halstead St., Pasadena, CA 91107

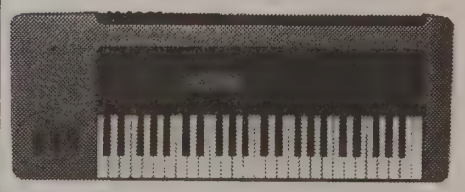
Call Today

VISA MasterCard DISCOVER

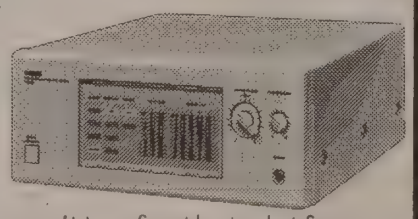
1(800) 240-2500 • (818) 351-9995

WORLD PREMIERE!
YAMAHA CLINIC
ONE NIGHT ONLY

YAMAHA and GOODMAN MUSIC present two new products that will change the way you think about synthesis and recording!



YAMAHA VL-1, The World's First Physical Modeling synthesizer, represents an entirely new approach to synthesis. This revolutionary machine uses no oscillators or sampled waveforms to create sound, instead a high-speed computer re-creates the sound of a real(or imaginary) instrument being played. This allows for more realism, depth, and performance control than any other form of synthesis which exists today. If you write, produce, or perform music you can't afford to be unfamiliar with this earth-shattering new synthesis technology!



The YAMAHA CBX-D5 Multi-Platform Digital Recording Processor is a new concept in Direct-To-Disk recording systems. It connects to the host computer via standard SCSI interface, allowing it to be used with any computer, using software written for that platform. The CBX-D5 offers 4-tracks of fully professional digital direct-to-disk recording, every major digital I/O format, a host of on-board DSP functions, MIDI control and more!

ONE NIGHT ONLY!
APRIL 18TH -7PM- BEVERLY GARLAND HOTEL
4222 Vineland Ave. At the Hollywood Freeway, North Hollywood
SEATING IS LIMITED! R.S.V.P. (213) 845-1145

process their data and publish it to other departments.

Corporate customers bought (and used) UNIX systems in order to take advantage of database applications. Even though UNIX provided a stable framework for multiuser database access, the database technology eclipsed the operating system. During the database boom, it was data access (and not just computer access) that proved lucrative. The people who used and benefited from UNIX database systems encountered the operating system itself only incidentally, and UNIX became entrenched in business without a lot of people learning how to use it.

WORKSTATION MEETS PC

Along with the emergence of multiuser database technology, the mid-1980s also saw the introduction of a new kind of UNIX computer: the engineering workstation with a Graphical User Interface (GUI) connected to a network of similar workstations. These computers were essentially powerful single-user computers that exploited UNIX multitasking to improve the productivity of the people who used them. The GUI made it possible for the user to keep track of several things at once, and the network enabled coworkers to collaborate more efficiently.

Engineering workstations succeeded spectacularly in the short term: they stimulated demand for powerful desktop computers, and for a while between 1988 and 1990, it seemed as though the desktop computer market was the only market in which success mattered.

However attractive they were, engineering workstations also raised troubling questions about ease of use. Network connectivity and a spiffy user interface did not necessarily guarantee increased productivity: whoever sat at the keyboard still had to know what to do. The general public wasn't exactly teeming with engineers either, and for most users, the almost-as-powerful, cheaper, easier-to-use personal computer was a perfectly adequate workstation substitute.

CLIENT/SERVER

The desktop wars continue to be important for hardware manufacturers, but the attention of UNIX entrepreneurs has been captured by another notion of how to realize a profit from UNIX. In the last few years, most of the functions for which we depend on computers have been redesigned using client/server architecture. Increasingly, UNIX computers are being used as servers in this architecture to manage all kinds of resources for consumers that are working on other computers.

The good thing about the client/server paradigm is that the server doesn't have any users in the traditional sense. Servers are essentially robots that are used by client programs. The human user masters the client program which, in turn, manipulates the server behind the user's back. In a well-designed client/server system, the user need not be aware of the server at all.

File servers and database servers have become common, but the UNIX automaton has much wider appeal than that. For example, the client/server notion makes UNIX systems a reasonable alternative for "point-of-sale" systems in retail, where at the checkout stand, cashiers use a scanner (or some other familiar piece of equipment) to enter information about purchases that is immediately transmitted to both inventory control and a module that tracks the cashier's cash drawer. (One of the early systems for creating custom audio tapes in record stores used an automated modem connection to a central UNIX computer to track sales and royalty information.)

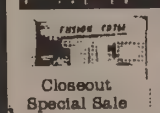
In the corporate world, the trend to centralized UNIX servers has also been the occasion for rebuilding data processing departments or Management of Information Services (MIS) groups. These groups now find themselves the custodians of large UNIX systems that publish resources of all sorts to network users and have relatively few interactive users.

These ideas about making money with UNIX have fallen in and out of style, but all of them seem to be popular now. What the heck, it's spring, and it might be a good time to think about going into business. Just do it carefully. ■

Next ACP Swapmeet Sun. May 22nd

The Multimedia Experts! Let us show you how

MEDIA VISION FUSION CD 16



Closeout Special Sale

Fusion Double CD 16 Kit DoubleSpeed NEC55J CD-ROM int.Pro Audio Spectrum 16 16-bit stereo sound card, spkrs,microphone 7th Guest and Compton's Encyclopedia, Arthurs Teacher Troubles and BattleChess 3000.

$359.88

SoundBlaster Pro 16 Special purchase of limited quantity at this price. Includes a ton of software. Requires Panasonic CD-ROM drive. ACP price only $129

Reveal The Ultimate CD-ROM Bundle

Panasonic 562 CD-ROM internal drive with 320ms access, 300KBytes data transfer rate, Multisession Photo CD Ready, 16-bit stereo sound card, SoundBlaster compatible, Speaker set, Headphones with built-in microphone, microphone, joystick and installation video. **Plus over 20 titles with a retail value over $1000 FREE!** Includes:

- Adventures, Mavis Beacon, MM Encyclopedia, National Park, US Atlas, Carmen Sandiego, Chessmaster 3000, Indiana Jones, King's Quest VI, Lord of Rings, Authorware, Macromedia Action SE, Microsoft Works & Multimedia, Clip Media SE, Dune, Space Shuttle, Mayo Clinic, World Atlas, Stellar 7

$599

REVEAL

SONY® BlowOut Price!

DoubleSpeed Kit at a SingleSpeed Price!

Special Purchase! Sony Model 33A Doublespeed CD-ROM Drive, MPC-2, Kodak Photo CD and Multisession compliant, SoundBlaster 16 compatible card with 16-bit stereo sound! Super easy to install!Comes with single disk install program for sound! Includes audio and data cable! ***looking for an economical CD solution this is it***

$249

CREATIVE

Discovery CD 16 DoubleSpeed Panasonic 563 CD-ROM drive and industry standard SoundBlaster 16 card with true 16-bit stereo, Stereo speakers, interface and software.

- Multisession Photo CD Ready
- 320ms access, 300 KBytes/sec
- CD-ROM XA Ready
- MPC-2 compliant

$359

Aldus Photostyler SE, Animals, MM Encyclopedia, Carmen Sandiego, Just Grandma and Me

Special Purchase Compton's 1994 Interactive Encyclopedia ACP while supply lasts! Save over 60% on the most popular selling CD Encyclopedia

$39.95

Bonus Offer! 10 pack of CD's for only $36 with any CD purchase!
Includes: World Fact Book, Stellar 7, Time Man of the Year, Kings Quest V, Animation Festival. Jets & Props, World Atlas 3.2, Sing-a-long Karaoke, CD-ROM of CD-ROMS and DOOM:Knee Deep in the Dead (limited offer to stock on hand w/o purchase $39)

Laser Printer Memory Upgrade Specials

HEWLETT PACKARD IBM **Panasonic**

Description	Size	Retail	ACP Sale
Apple Mac Classic 1Mb Kit	1Mb	69	$49
Epson EPL6000	2Mb	199	149
HP Deskjet 500 Cartridge	256K	79	29
HP LaserJet IIP, III, IIIP, IIID	0K	79	79
HP LaserJet IIP, III, IIIP, IIID	1Mb	115	79
HP LaserJet IIP, III, IIIP, IIID	2Mb	189	129
HP LaserJet IIP, III, IIIP, IIID	3Mb	249	149
HP LaserJet IIP, III, IIIP, IIID	4Mb	330	199
HP95LX Palmtop	128K	149	59

256x4 Upgrade dRAM's 100ns...$6.95 80ns...$7.49

IBM 4019/4019e	0K	99	$29
IBM 4019/4019e	1Mb	169	79
IBM 4019/4019e	2Mb	260	139
IBM 4019/4019e	3.5Mb	399	189
IBM 30F5360	2Mb	129	99
Panasonic 4420/4450i	0K	79	29
Panasonic 4420/4450i	2Mb	190	119
Panasonic 4420/4450i	3Mb	260	149
Panasonic 4420/4450i	4Mb	330	189
Toshiba 8306U T1200	2Mb	129	79
Toshiba 8316U T2000SX	1Mb	129	69

The Best Buys in Notebooks at ACP

TOSHIBA®

T1950 486DX2 Satellite™ 486DX2/40, 3.3volts PCMCIA 2.01 slot, 4Mb RAM,120Mb Hard Drive, Ballpoint Mouse, Mono, NiMH Battery, longer life, DOS 6.0 and Windows installed

$1989

T1950CS Color/120Mb . $2549
T1950CT Color/120Mb . 2899
T3400 Portege/120Mb .. 2348
CAll for other models!

COMPAQ

Contura 4/25 Notebook Great New Price! Fast 486 Notebook with 120Mb Hard Drive, 4Mb RAM, Mono VGA LCD display with MS-DOS 6.0 Windows 3.1 installed plus EZ Help and handy trackball.

$1849

Aero 4/25/84Mb $1499
4/25C Color/120Mb 2499
Plus Compaq 3 yr warranty

TEXAS INSTRUMENTS

Reduced! TravelMate 4000E 486DX2/50 Power! Windows in 15 seconds! a mere 6.2lbs with first 4mm full-travel keyboard, 4Mb RAM, 200Mb drive and Color! Winner of 5 Editors Choice Awards DOS 6.0 and Windows installed plus more!

$3199

4000E WinSX25/120Mb . $1849
WinDX2/50E/200Mb 2699

EPSON®

New! 486 Notebook ActionNote™ 4SLC2-50 5.5lbs, 4Mb, Trackball, 180Mb, Fax/Modem **ActionNote™4000** super lightweight at 3.8lbs.Call

$1599

TOSHIBA®

Factory Closeouts "B" stock refurbished by Toshiba.Limited availability

T1900/120 ..... $1498
T1850/120 1598
T4400SX/120 1498

Notebook Specials

Famous Brand 386SXL/25MHz notebook with built-in trackball, fax/modem DOS 5.0 ,and Windows, 4Mb RAM and 80Mb Hard Drive. Ltd

$1099

Famous 486SLC/25 notebook with 120Mb hard drive, 4Mb RAM, LCD mono, DOS and Windows. 24/96 Fax/ Modem and case

$1399

Just -in! Only at ACP at these Prices!

Optical Disks Prices starting at

Special purchase of mixed lot of rewriteable optical disks. Most new some used. DOT • Sony • Mitsubishi • Verbatim • 512, 1024 sectors

$19.95

Disk	Capacity	Sectors	New	Used
3.5"	128Mb	512	$29.95	$19.95
5.25"	600Mb	512	49.95	29.95
5.25"	650Mb	1024	59.95	32.95

DataTrek

14.4K PCMCIA Fax/Modem PCMCIA Type II compatible. Perfect for all notebooks with PCMCIA slot. New Low Price!

$269

24/96 PCMCIA Fax/Modem PCMCIA 2.0 compatible. While supply lasts at this unbelievable price!

$99

3 CD Package MPC Wizard, WinTutor and WorldView! All 3 only $24.95

$24.95

Your Choice! Loom great CD or **CD Deluxe** with 4 games on one CD!

$18

Toolworks Illustrated Encyclopedia Popular CD encyclopedia formerly selling for $149 now at ACP for only $19 while supply lasts

$19

Coprocessor Sale While supply lasts as low as $19.95

$19.95

Lotus SmartSuite v1.1 Inc:AmiPro, 123, cc:Mail and Freelance

$59.95

ADS On-Demo!

vga to tv ELITE put you VGA screen on your TV! Plug n'Play! ext.

$249

Glare Guard™ Rated top monitor filter by optomertrists.

$39.95

as low as

CD Software Vault 3 CD Pack! Gold, Game, and Windows Collection

$25

Kalok K-STOR Removeable Hard Drive concept at prices same as standard drives. 250Mb

$299

Daewoo Monitor Special SVGA 14" Color with .39 dot pitch. Now only $219 SVGA 14" with .28 dot pitch only $259 noninterlaced only $359

$219

NMB "Right Touch"101 Keyboards Full size with 101 keys at $44.95 or small footprint at $34.95

$34.95

Pacific Data Blowout
HP II Plotter Cartridge! $59
HP II Headlines Cartridge!$49
HP II Postscript Cartridge!$89
UPD Turbo "25-in-1" Fonts $39
limited supply

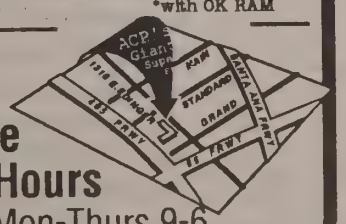
Acculogic Memory Boards* AT Memory expansion card only $69 MCA PS/2 Memory expansion card only $99 limited to stock on hand

*with OK RAM

FAX (714) 558-8849
Retail Store (714) 558-8813
Corporate and Government Sales (800) FONE-ACP

Advanced Computer Products, Inc.
ACP SUPER STORE
Since 1976
1310 E. Edinger Santa Ana, CA
Edinger at Grand

©1993 ACP, Inc. Prices subject to change without notice. All logos and trademarks are copyrights and trademarks of their respective owners.



Store Hours
Mon-Thurs 9-6,
Fri-Sat 9-5

Tax Traps For The Unwary

Suggestions For Technology Companies And Professionals That Will Help Avoid The More Frequently Encountered Missteps

BY DAVID A. SIMON, CPA AND JENNIFER R. CHERNISS

Each year at tax time a percentage of frustrated taxpayers—more frustrated than the rest of them—is snagged by some tax trap or morass that could have been avoided had they known what to watch for. Some folks think of tax time as hunting season for IRS auditors. But with a little forewarning and forearming agains the hazards ahead, far fewer need fall prey.

DO YOUR TAX PLANNING BEFORE YOU SIGN THE DEAL

For tax purposes, once the contract is signed, the deal is done. If you didn't do your tax planning beforehand, you're probably stuck with the consequences now. As obvious as this seems, after-the-fact "planning" for tax implications sums up the theme of the most common difficulties encountered by technology professionals and businesses we see.

Software developers and programmers entering into development or licensing agreements seem especially prone to signing big-dollar contracts without first consulting their tax advisor. Only when it comes time to actually pay those taxes do they realize what ramifications were fixed at the time of the agreement.

Tax attributes should be an important part of the negotiation process, often entering the discussion at the earliest stages, because what benefits one party is likely to be bad news for the other. If one party is getting all the tax goodies, the other ought to pay less for the deal.

Here's an example of how tax issues can affect the value of a deal. Papaya Mason believes the source code she is writing will pass the tests for a software-related patent. She is negotiating with BlissTech, Inc., which wishes to acquire the rights. If Mason sells BlissTech all substantial rights to her patent (whether or not a patent has actually been issued), as opposed to contracting her programming skills, she may be able to structure a deal that qualifies for capital gains treatment, thereby receiving the favorable capital gains tax rate and avoiding employment taxes. She'll need to meet additional conditions as well.

But BlissTech is fighting the deal, because it would have to depreciate those patent rights over time rather than currently deduct a research expenditure. Worse yet, the IRS might argue that the deal involved the acquisition of "intangible assets constituting a substantial portion" of Mason's business. Under a new tax provision (IRC Section 197), such rights would take fifteen years to depreciate. Mason and BlissTech have some haggling to do.

▼

Even if a tax preparer is a CPA, if the firm employing him or her is not a CPA firm, registered with the Board,

you won't be protected.

Moreover, to avoid the extra long depreciation, they may first wish to ask the IRS to affirm, in a private letter ruling, that the transfer is free from the Section 197 catch; but the IRS may not agree to rule and the entire process must be completed rapidly enough that the software doesn't rot.

With ultimate recklessness, the deal can be structured such that neither party acquires the possible tax benefits. If, for example, in addition to the product being substantially all of Mason's business (resulting in rough treatment for BlissTech), Mason transfers the patent after already having sold a few copies of the software, thus disqualifying it for capital gains treatment on her part.

INCORPORATING TO SECURE CONTRACTS

If you've sought programming gigs through employee leasing companies, you may have had a body shop tell you that you'll need to incorporate for them to find work for you, or to place you at a particular site. Step carefully.

This trap catches too many naive contract techies. The arrangement poses many potential tax problems and hidden costs. Often the job shop is merely looking for a way to pass its employment tax obligations on to the worker. If you arm yourself with knowledge of the consequences, you'll be in a better negotiating position with the broker.

Incidentally, to get contract work without going through a middle entity, look amid the MicroTimes User Group Network listings, under "Associations." This resource presents groups and professional organizations where industry people go to make connections, stay in touch with developments in their field and marketplace, as well as share gossip and horror stories. These groups are a rich source of specialized job listings and leads.

PERSONAL HOLDING COMPANY TAX

If you do incorporate to provide consulting or engineering services, or licensing computer software, one of the nastiest traps is known as the Personal Holding Company (PHC) tax This penalty tax is an add-on,

continued on page 79

RESOURCES:

Internet Access Providers (a by no means complete list):

dial-n-cerf
1-800-876-2373

HoloNet
(510)704-0160

Netcom Online Communication Services
(408)554-UNIX

The Portal System
(408)973-9111

David A. Simon, CPA (M.S., Taxation), is in tax and accounting practice in Oakland and writes on a variety of business issues. His clients include professionals and businesses throughout the state. He can be reached at (510)893-5753.

Jennifer R. Cherniss specializes in making boring technical information seem less so. Her writing services can be obtained at (510)893-5753.

ADVANCED COMPUTER and TECHNOLOGY

Location 1
Phone (714) 670-6321
Fax (714) 670-6322
7342 Orangethorpe Ave. #C-106
Buena Park, CA 90621
(714) 670-6321

Location 2
Phone (310) 618-6912
Fax (310) 618-6914
2430 Torrance Blvd # E
Torrance, CA 90501
(310) 618-6912

MOTHER BOARDS WITH CPU

386-40DX 128K cache	$ 89.00
486-66SLC-2 IBM VLB Mathco..	$269.00
486-33DX Local Bus	$339.00
486-40DLC w/math co	$149.00
486-50DX 256K Cache VLB	$449.00
486-66DX2 VLB 256K Cache Overdrive ready Intel	$469.00
486-66DX2 VLB 256K Cache ZIF Socket ready Intel	$479.00
Blue Lightning IBM BL2 SLC3-75MHZ	$449.00

MONITORS

S.V.G.A. 39 14"	$185.00
S.V.G.A.28 14"	$217.00
S.V.G.A14".28 NI	$235.00
V.G.A. 14" COLOR	$169.00
SVGA 14".28 NI EDISION L.R	$240.00
S.V.G.A. 15" NI .28	$349.00
S.V.G.A.17" NI.28	$599.00

NETWORK CARD

Ethernet 16 Bit (NE2000) $49.00

Please call for other cards

HARD DRIVES

170MB	IDE	$189.00
213MB	IDE	$190.00
260MB	IDE	$209.00
270MB	IDE	$219.00
340MB	IDE	$249.00
420MB	IDE	$269.00
540MB	IDE	$369.00
1.08GB	SCSI	$739.00

ACCESSORIES

MidTower case w/ps	$ 59.00
MiniTower case w/ps	$ 35.00
FullTower case w/ps	$ 79.00
Desktop case w/ps	$ 55.00
1.2 MB FD 5" 1/4	$ 45.00
1.44 MB FD 3" 1/2	$ 33.00
Key Board 101	$ 17.00
Key Board 101BTC	$ 22.00
Key Board Focus 2001	$ 39.00
Mouse w/pad	$ 7.00
TrackBall	$ 20.00

14.4 SEND/RECEIVE FAX MODEM V.33BIS, V.42BIS

14,400bps-Data/Fax Speeds-Supports COM 1-4-Software included
5years Warranty

INTERNAL		EXTERNAL	
Calcom	$ 89.00	Calcom	$115.00
Zoltrix	$ 99.00	Zoltrix	$129.00
Zoom	$129.00	Zoltrix Pocket	$179.00
Cardinal	$129.00	Zoom	$149.00
Supra	$129.00	Supra	$149.00
Intel	$149.00	Supra Mac	$169.00
US Robotics	$149.00	Intel	$169.00
Practical peripherals	$159.00	US Robotics	$169.00

486-33DX VLB

- *486-DX VESA INTEL W/256K Cache.
- *4MB Ram 70n/s.
- *VLB Graphics Card w/1MB.
- *VLB IDE CARD.
- *DIGITAL Mini Tower
- *101 keyboard.
- *1.2 & 1.4MB FDD.
- *210 MB IDE HD
- *14" NI SVGA Monitor .28

$1079.00

486-66DX2VLB — $1269.00

- *486-DX VESA INTEL W/256K Cache.
- *4MB Ram 70n/s.
- *VLB Graphics Card w/1MB.
- *VLB IDE CARD.
- *DIGITAL Mini Tower
- *101 keyboard.
- *1.2 & 1.4MB FDD.
- *340 MB IDE HD
- *14" NI SVGA Monitor .28

486-40 DLC W/MATHCO

- * 486-40DLC CPU
- * 128K Cache&math co
- * 170 MB IDE HD
- * Mini Tower
- * 1.2 & 1.44 MB FD
- * SVGA card w/1MB
- * Super IDE I/O Cont.
- * 4 MB Ram 70 N/S
- * AT101 Keyboard
- * 14" SVGA Monitor

$859.00

HEWLETT PACKARD

INKJET PRINTERS

Dskjet 310 color portable	$ 310.00
Deskjet 520	$ 279.00
DeskWriter	$ 280.00
Deskjet 500C	$ 385.00
Deskjet 550C	$ 450.00
Deskjet 560C	$ 559.00
Deskjet 1200C	$1320.00
DeskWriterC	$ 385.00
Deskjet Portable	$ 370.00
DeskWriter 550C	$ 555.0
PaintJet XL-300	$2165.00

LASERJET PRINTERS

HP 4 w/Toner	$1325.00
HP 4M w/Toner	$1785.00
HP 4P w/Toner	$ 945.00
HP 4MP	$ CALL
HP 4L w/Toner	$ 655.00
HP 4L M w/Toner Compl	$ 980.00
HP 4SI w/Toner	$2825.00
HP 4SI MX	$ CALL

SCANNERS

HP IIP w/AT CTRL	$ 685.00
HP IICX	$ 935.00

TOSHIBA NOTEBOOKS

- T1950,486DX2-40,4MB, 120MB/200MB ..... $ Call /$ Call
- T1950C,486DX2-40,4MB, 120MB/200MB ..... $ Call /$ Call
- T1950CS,486DX2-40, dual scan 4MB,120MB/200MB ..... $CALL
- T4600C,486DX-33,4MB, 200MB/340MB $3989/ $4295
- T6400C,486DX50,4MB,200. (Active color) $4895
- T6600C,486DX-66,4MB, 500MB Active color ..... $ Call

IBM

Thinkpad500 85/170MB	$1999/ $ 2465
Thinkpad350 125/250MB	$CALL
Thinkpad350C 125/250MB	$CALL
Thinkpad710T 60MB Pentpoint	$ 3490
Thinkpad750/750C/750B	$CALL

TAPE BACK UP

Colorado 120	$ 99.00
Colorado 250	$155.00
Conner250	$137.00
Trackker 250	$319.00
Tape cartridge 2150	$ 16.00

VIDEO CARDS

1 MB Trident	$ 59.00
Diamond Stealth 24 VLB 1MB	$149.00
Diamond Viper 24 VLB 2MB VRam	$365.00
VLB Cirruslogic 1MB SVGA	$ 69.00
VLBTrident1MBSVGA	$ 69.00
Genoa VLB 1 MB	$115.00
Orchid Farenheit VLB 1MB	$149.00
Orchid Farenheit VLB 2MB	$195.00

486-SLC2 66 VLB W/MATHCO

- * 80486SLC33/66VLB W/Math Co
- * 170 MB IDE HD
- * Digital Mini Tower
- * 1.2 & 1.44 MB FD
- * VLB SVGA w/1MB
- * VLB IDE I/O Cont.
- * 2 MB Ram 70 N/S
- * AT101 Keyboard
- * 14" S VGA Monitor

$899.00

386-40 DX W/MATHCO

- * 80386DX-40 CPU
- * 128K Cache
- * 170 MB IDE HD
- * Digital Mini Tower
- * 1.44 MB FD
- * 2S/1P/1G
- * 4 MB Ram 70 N/S
- * AT101 Keyboard
- * 14" SVGA Monitor

$699.00

NEC Monitors please call:

ViewSonic

ViewSonic 4E 14" .28	$260.00
ViewSonic 6E 14" .28 NI	$285.00
ViewSonic 14E 14" .28 NI 70Hz	$320.00
ViewSonic 15E 15" .28 NI 76Hz	$355.00
ViewSonic 15 15" .28 NI Flat 76Hz	$425.00
ViewSonic 17G 17" .28 NI Flat	$769.00
ViewSonic 17 17" .28 NI Flat 76Hz	$930.00
ViewSonic 20 20" .28 NI Flat	$1469.00
ViewSonic 21 21" .26 NI Flat	$1719.00
MAG LX1450 14" .28 NI	$339.00
MAG MX14S 14" .25 NI Trinitron	$509.00
MAG LX1564 15" .28 NI	$399.00
MAG MX15F 15" .28 NI digt cont.	$499.00
MAG MX17F 17" .28 NI digit cont.	$869.00

IO CARD

AT I/O 2S,1P, 1G	$ 10.00
AT I/O SUPERIDE	$ 14.00
AT I/O Local Bus w/IDE	$ 24.00

MEMMORY

1 MEG SIMMS 70n/s. $ 34.99
4 MEG SIMMS 70n/s. $ CALL
4MEG 72 Pin..... $ 152.00

Multimedia upgrade kit

With Panasonic 563 double speed
Sound Blaster Pro, 4 CD titles
Speakers & Cables $349.00

CD Rom Panas 562 300m/s d/speed	$149.00
CD Rom Panasonic 522 390m/s	$159.00
Mitsumi LV05S 350m/s	$140.00
Mitsumi FX001-1D w/controller	$149.00
Toshiba 3401B 200m/s	$305.00
NEC CDR 510 3X1	$349.00
NEC CDR 210	$169.00

CREATIVE

SoundBlaster Pro Deluxe	$ 79.00
SoundBlaster 16 Basic	$109.00
SoundBlaster 16 MCD	$169.00
SoundBlaster 16 MCD ASP	$180.00
SoundBlaster 16 SCSI-2	$160.00
SoundBlaster 16 SCSI-2 ASP	$203.00
Spectrum 16	$ 99.00
Studio 16	$129.00

3 MONTHS SAME AS CASH !

We Will Try To Beat Any Advertised Price !

All systems come with a one year parts and labor warranty, 15 days on-site service. Prices are subject to change without notice.

Financing Available

Not responsible for typo

All product names are trademarks of their respective companies.

Computer Network Training

ATTENTION:
Computer Support Personnel, System Administrators, Hardware Field Engineers, Anyone Interested in PC Networking

Presented by InstructionPLUS

Learn how to Install PC Networks. This One Day Hands-On Workshop will show you how to:

Step One

- Install and Configure a PC Workstation.
- Install and Configure Network Adapter Cards.
- Configure and Install Software Drivers.
- Install a Basic Configuration on a File Server (with a partner).

Step Two

- Establish Communication from Workstation to File Server.
- Learn How to Log In and Use File Server Resources.
- Understand Network Communications.
- Use Basic Network Commands in Mapping Hard Drives, Sharing Printers and Much More.

Step Three

- Connect All File Servers to Same Network to Form Larger Network.
- Understand Broadcasting Techniques used by File Servers in Communication with Each Other.

Step Four

- Load a Peer-to-Peer Network Operating Software System on a Server-based Network.
- Configure Share Network Resources such as Applications, Hard Drives, Printers, Faxes, and CD-ROMS.

All This For Only $495.00

Coming to Costa Mesa, Thursday May 5th • Coming to Riverside, Tuesday May 10th
Coming to San Bernadino, Saturday May 14th • Coming to Ontario, Wednesday May 18th
Coming to Pasadena, Monday May 23rd
You Won't Learn All This from Boring Over-Head Slides or Reading Out of a Book.
You and a Partner Will Perform Most of the Software Loading and Configurations.
Get The Training You Need to Stay Competitive

For More Information or to Reserve Your Seat Call InstructionPLUS at:

Free Cellular Phone!*
One To Each Prepaid Student
Activation Not Included
$100.00 Value

1-800-618-9646
Fax 714-693-2940

** Free Cellular Phone Offer Good Only to Reservations Pre-Paid by Company or Personal Check at least Seven Days prior to Requested Date, No Credit Cards Accepted. InstructionPLUS reserves the right to substitute cellular phone model with equivalent. InstructionPLUS also reserves the right to cancel Workshops for any reason; all money will be refunded or students will have the option to attend a similar workshop at an alternate location.*

SINCE 1984

EXPERIENCE — **QUALITY • PRICE**
YOUR SERVICE & REPAIR CENTER

SPECIAL

VESA LOCAL BUS SYSTEM

- 4MB RAM Up To 32MB
- TEAC 1.44MB FDD
- 200MB Hard Drive
- 2S/1P/1G
- SVGA Monitor (0.28dpi)
- Mini Tower Case,UL Pwr.
- Keyboard & Mouse
- VESA Local Bus 1M SVGA 32 Bit Card

486SX/25MHz.....$1055
486DX/33MHz.....$1189
486DX2/50MHz.....$1320
486DX2/66MHz.....$1399
MANY OTHER OPTIONS AVAILABLE

WE SPECIALIZE IN:

- COMPLETE NOVELL NETWORKING SOLUTIONS
- NETWORK ON-SITE SERVICE AND TRAINING
- IN-HOUSE CERTIFIED NETWORK ENGINEER
- CARRY MANY NETWORKING AND PC PERIPHERALS

Novell Certified NetWare Engineer

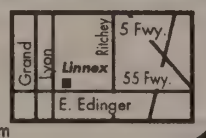
CASES & POWER

Multimedia Case	$Call
486 VL Motherboard (Made in USA)	65
Mid Tower, 8 Bays, w/250W/Display	62
Full Tower Case, 10 Bays, 230W UL Display	89
Mini Tower, 5 Bays, w/200W/Display	49
Desktop Case, 5 Bays, w/200W/Display	49
Super Tower, 8 Bays, 440W UL, Wheels	358

PENTIUM w/PCI SYSTEM AVAILABLE!

(714) 558-3399
Fax (714) 558-3219
LINNEX COMPUTERS, INC
1701 E. Edinger, C3 Santa Ana, CA 92705

Complete Service Department On Premises
Business Hours: M-F 9:00 am to 5:30 pm



BUSINESS SOLUTIONS

Continued from page 42

package. The design of BitCom is excellent, with scripting so you can automatically log on to bulletin boards and services.

While I welcomed this module, I must confess that I've had a good deal of trouble with it. First, I haven't been able to get the scripts to log on to my favorite bulletin board. I hesitate to lay the blame squarely on the software, as it could be the modem or the system that I am using, but I suspect not.

I have also had a fair number of lockups with the communications module. I spent time with Bit Software's technical support. Although they told me I should not be having these problems, I still do. I'm still unable to report conclusively just what is causing these problems.

A final word of warning is that there is so much capability in this package that 4MB of memory isn't quite enough. I have been able to receive faxes without trouble, but if they are too long, the transmission stops, as a result of insufficient memory. If you're serious about receiving long faxes, make sure you have enough memory.

For $129, you sure get your money's worth. Even if you cannot take advantage of all the features this package offers, it is well worth it. But while I am excited about what this package can do, I eagerly await the next bug-free release.

COMPUTER OF THE MONTH:

AcerNote 735C

In benchmark after benchmark, Acer computers consistently rank high on the list. Their new 735C notebook computer is a beautifully designed and constructed piece of equipment. It features an i486SX processor running at 33MHz, a large dual scan passive matrix display, and 4MB of memory, which you can upgrade to either 8 ($269 extra) or 12MB ($699 extra).

The AcerNote measures 11.4" x 8.6" x 2.1" and

LAPTOPS

PC SERVICE

WHY BUY FROM US?

WE BUILD TO YOUR SPECS!

We Service What We Sell!

We Won't Rest Till It's Right!

We Support Our Customers!

MULTIMEDIA CORNER

CD-ROM TITLES:

Animals (San Diego Zoo)	$16	Monkey Island	15
Compton's Int. Encyclopedia	39	Myst	59
Dune	28	National Parks	17
Encarta	92	Reference Library (Tool Works)	15
Maniac Mansion	32	Return to Zork	21
Mayo Clinic	16	Total Baseball	19

CD-ROM BUNDLE

Add to Any System:

- Toshiba 3401B Internal CD-ROM
- Media Vision ProAudio Spectrum 16 Sound Card
- LabTec / Koss Speakers
- Spectrum 16 Sound Card
- CD-ROM Software bundle including 6 titles: *Grolier's Encyclopedia, US/WORLD Atlas, (The San Diego Zoo) Animals, Mavis Beacon Teaches Typing, Chessmaster 3000*

$579 Labor Included

486DX-33 VESA LOCAL BUS

- 486 DX-33 MHz Vesa LB, 256K Cache
- 1.2MB & 1.44MB Floppy Drive
- 250MB Hard Drive
- IDE VESA LB
- 4MB RAM
- Cirus Logic Vesa LB 1MB
- Super VGA 1024x768 Color Monitor .28 Non-Interlaced
- 101 Keyboard
- Mini-Tower Case
- Serial Mouse

$1309

486DX2-50 VESA LOCAL BUS

- 486DX2-50 MHz, 256K Cache,
- 4 MB RAM
- 1.2MB & 1.44MB
- 250MB Hard Drive
- SVGA 1MB Card
- Super VGA 1024x768 Color Monitor .28 Non-Interlaced
- 101 Keyboard
- Mini-Tower Case
- Serial Mouse

$1319

486DX-40 VESA LOCAL BUS

- 486 DX-40 (AMD) VESA LB, 256K Cache
- 4 MB RAM
- 1.2MB & 1.44MB Floppy Drive
- 250MB Hard Disk
- SVGA 1MB Card
- Super VGA 1024x768 CTX Color Monitor .28 Non-Interlaced
- 101 Keyboard
- Mini-Tower Case
- Serial Mouse

$1236

486DX2-66 VESA LOCAL BUS

- 486 DX2-66Vesa LB, 256K Cache
- 4MB RAM
- 1.2 & 1.44MB Floppy Drive
- 250MB Hard Drive
- IDE Vesa LB Controller
- Cirus Logic Vesa LB 1MB
- Super VGA 1024 x 768 Color .28 Monitor, Non-Interlaced
- 101 Keyboard
- Mini Tower Case
- Serial Mouse
- CPU Cooling Fan

$1499

UPGRADES

UPGRADE YOUR 286 OR 386 COMPUTER SYSTEM WITH THESE OPTIONS

MOTHERBOARDS & MEMORY:

486DX-40 MHz w/256K Cache, w/4MB RAM, VLB	$489
486DX2-66 MHz VESA LOCAL BUS w/ 4MB RAM & 256K Cache	$729

HARD DISKS & TAPE:

250MB DRIVE	$239
420MB DRIVE	$299
540MB DRIVE	$429
250 MB TAPE KIT	$169

CONTROLLER CARD:

IDE with I/O	$13

CD ROM & MULTIMEDIA:

Sound Blaster Pro Sound Card	$137
MULTIMEDIA UPGRADE KIT Sound Blaster Pro, Panasonic CD ROM, 5 Titles, Speaker Set	$329
Toshiba 3401B Internal CD ROM with SCSI Controller	$419
Texel Double Speed Internal CD ROM Bundled with MediaVision Spectrum 16 Sound Card	$434

SPECIALS

Fax/Modem 14.4K Internal	$119
OKIDATA OL400E LASER PRINTER	$509
NETWORK YOUR OFFICE WITH LANTASTIC!	
Novell Netware Ver. 3.12 (5 User)	$639
Novell Netware Ver. 3.12 (10 User)	$1422
Network Start-up Package: 2 Station Installation, Software, Network Cards & Cable, Labor Included (In Shop)	$399
OnSite Installation Starting at	$439

NETWORKING SPECIALISTS

NOVELL
LANTASTIC
TELEMAGIC

FACTORY AUTHORIZED REPAIR ON MOST BRANDS

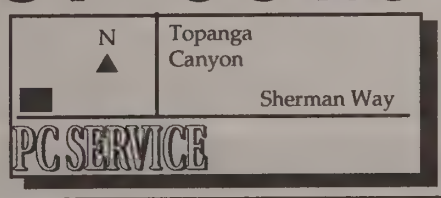
PRICES AND AVAILABILITY SUBJECT TO CHANGE WITHOUT NOTICE

PC SERVICE

22017 Sherman Way • Canoga Park, CA 91303

818-887-0040

Fax
818-887-1470



CALIFORNIA
Computer Show & Sale

LOWEST PRICES
IN THE USA!
PC Compatibles · Hardware · Software · Accessories

UPCOMING SHOWS

ANAHEIM STADIUM-INDOORS
April 23, 1994
2000 State College Blvd., Anaheim

ANAHEIM STADIUM-INDOORS
May 21, 1994
2000 State College Blvd., Anaheim

ANAHEIM STADIUM-INDOORS
June 11, 1994
2000 State College Blvd., Anaheim

ANAHEIM STADIUM-INDOORS
July 23, 1994
2000 State College Blvd., Anaheim

ANAHEIM STADIUM-INDOORS
September 10, 1994
2000 State College Blvd., Anaheim

ANAHEIM STADIUM-INDOORS
October 1, 1994
2000 State College Blvd., Anaheim

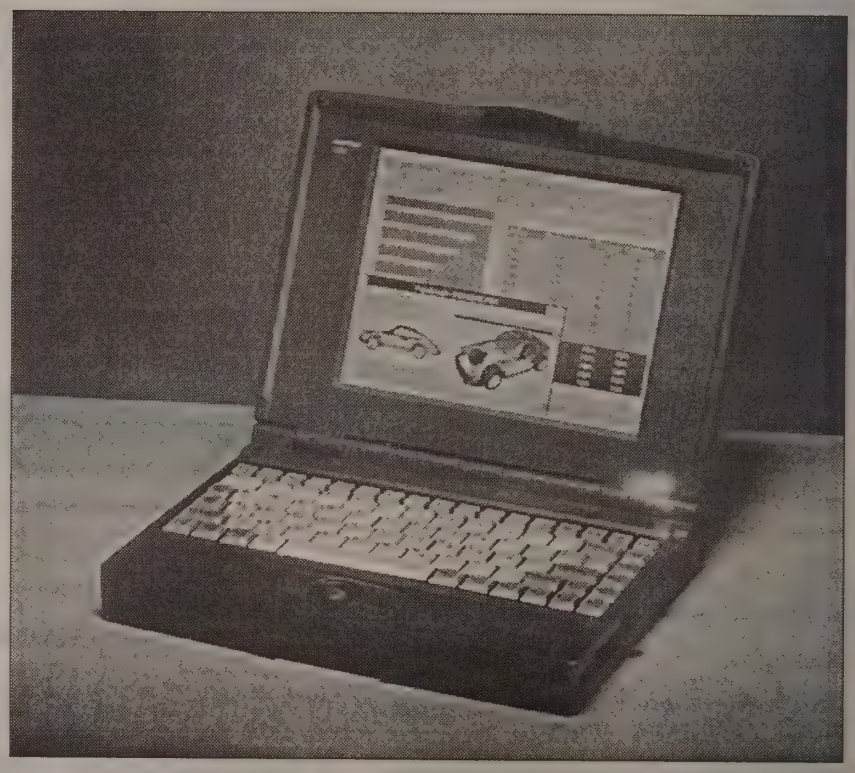
All Shows from 10a.m. to 4p.m.

$1.00 ADMISSION

The AcerNote 735C comes loaded and ready for business.

weighs 6.4lbs. The basic configuration includes a 210MB hard drive as well as a 1.4MB 3.5" floppy drive. A single serial port and parallel port are standard equipment.

The AcerNote 735C comes loaded and ready for business. Both DOS 6.2 and Windows 3.1 are installed. All of the software that comes with the machine is also included in compressed form so you can download the distribution software directly from the hard drive. Instruction manuals are, of course, shipped with the package. All you have to do to begin is pop the nickel metal hydride battery in place and turn the machine on.



It's advisable to begin with the AC adapter in place as this will ensure a fully charged battery and conserve power during the time you are exploring the machine. Additional NiMH batteries ($169) are available. Battery packs recharge in about two hours.

The keyboard is certainly adequate, but it is easy enough to use an external keyboard of your choice—simply plug any PS/2-compatible keyboard into the port on the side. For those on the go who prefer to travel with a numeric keypad ($69), it plugs into the same port. The installed keyboard has a good touch and feel as well as layout. The most interesting thing about its design is that it can be removed to gain access to the guts of the machine, where you can add extra memory or other upgrades.

This computer is designed for use with Windows, and a trackball is built into the unit just below the keyboard. More and more, I am coming to prefer a regular mouse connected through the serial port for serious work. The design of this machine makes it simple to switch between the trackball and a mouse. Simply plug in the mouse to the serial port and the trackball is automatically disconnected. There is no need to change anything in the config or autoexec files.

The 9.5" color LCD provides a clear, crisp display, but you can easily add an external color monitor. The local bus video built into this system adds to the speed of the video display when working with CAD applications or other software that makes lots of demands on the video system. I'm discovering that for text-based applications, there is not that much performance advantage to local bus systems. Nevertheless, this is a significant advantage to this computer as it is optimized for any kind of work you may want to do.

The 735C comes with either one PCMCIA III or two PCMCIA II slots. The only difference between type II and III is the physical height of the device. So if you use a type III device, there is only room for one card, but if you use the thinner type II cards, you can add two different PCMCIA devices. Acer offers PCMCIA network cards ($349) as well as a fax modem card ($249).

The final feature of this machine is the technical support Acer offers. A twenty-four-hour replacement plan assures you of continued service even if you have a hardware problem. An international traveler's warranty gives you protection anywhere in the world, and a bulletin board and fax support are available twenty-four hours a day. This is a wonderful computer with more features than I have been able to mention. Rest assured that you will be pleased with the Acer 735C. ■

NEW TECHNOLOGIES
COMPUTER APPLICATIONS

PASADENA
461 N. Lake Ave.
(818)356-0397
FAX (818)356-0068

ROWLAND HEIGHTS
19230 E. Collima Rd.
(818)965-7004
FAX (818)913-6938

SANTA FE SPRINGS
11861 E. Telegraph Rd.
(310)946-2060
FAX (310)942-0040

Intel 486™ Vesa Local Bus

Intel 486™ microprocessor
4MB RAM (Exp to 64MB)
128K Cache (Exp to 512K),3 VL Bus
1.44 Floppy Drive
420MB IDE Hard Drive
32-bit SVGA Graphics Card w/1MB
CTX 1561LR 15"SVGA Color Monitor (Low Radiation)
2 Serial/ 1 Parallel/ 1 Game
Enhanced 101 Keyboard
Hi-Res Mouse

WinValue DX 33 MHz	$1295
with CTX 14" .28 SVGA Monitor and 260MB Hard Drive	$1145
WinDeluxe DX2 50 MHz	$1395
with CTX 14" .28 SVGA Monitor and 260MB Hard Drive	$1245
WinMax DX2 66 MHz	$1495
with CTX 14" .28 SVGA Monitor and 260MB Hard Drive	$1325

CTX

Monitor shown on this ad is the new 15" CTX 1561.

Intel 486™ SX 33 MHz

Intel 486™ microprocessor
4MB RAM
1.44 Floppy Drive
200MB IDE Hard Drive
SuperVGA Graphics Card
14" SuperVGA Color Monitor
2 Serial/ 1 Parallel/ 1 Game
Enhanced 101 Keyboard
Hi-Res Mouse

WinStation	$ 899
WinStation-CD	1059
WinStation w/CD-ROM	

Store Hours:
M-F 9am-7pm, Sat. 10am-6pm,
Pasadena also open Sun. 12pm-5pm

intel inside

The Intel Inside Logo is a registered trademark of Intel Corporation.

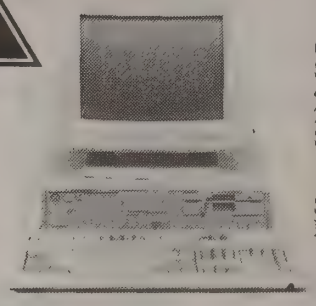
Corporate, Government, & School POs Welcome - Prices Reflect 3% Cash Discount
COD Orders Accepted - California Shipping Address Must Add Appropriate Tax
Prices Subject To Change Without Notice - All Sales Final
Subject to Credit Approval

MICRO MARKETPLACE

IMPOSSIBLE PRICES!!!

Best Quality With The Best Service

Deal of the Decade!!!



IBM 486 66MHz VESA Local Bus

(made in USA)
Super Mini Digital Case
4MB RAM
250MB Hard Disk
Super I/O & IDE Controller
101 Enhanced Keyboard
1.44MB 3 1/2" Floppy Drive
SVGA Monitor w/Card
Hi-Res Mouse

$959

486DX/33MHz

(VESA LB M/B)
(256K Cache)
200W Power Supply
Super Mini Digital Case
4MB RAM
250MB Hard Disk
Super I/O & IDE Controller
101 Enhanced Keyboard
HI-RES Mouse
1.2MB & 1.44MB Floppy Drives
SVGA Monitor w/Card

$999

486DX2-66MHz (VESA LB)

Pentium Ready (ZIF)
(256KB Cache)
200W Power Supply
Supply Mini-Tower Case
4MB RAM
250MB Hard Disk
VESA Super I/O & IDE Controller
101 Enhanced Keyboard
1.2MB & 1.44MB
Floppy Drives
SVGA Monitor (.28dpi, Multi-Freq.)
1MB VESA SVGA Card
HI-RES Mouse

$1275

CYGMA NOTEBOOK SPECIALS

AST

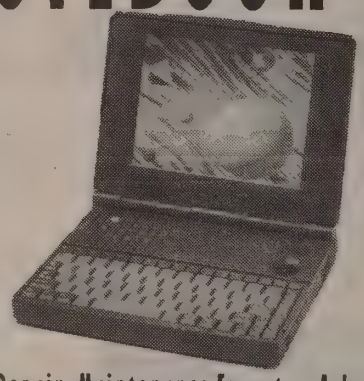
386SL Penbased Notebook
4MB RAM
120MB H.D.D.
PCMCIA Type II Slot
DOS 6 & Windows 3.1

$999

HYUNDAI

486 SLC-33
4MB RAM
120MB Hard Drive
Trackball Built-in
PCMCIA Slot II
DOS 6 & Windows 3.1
w/Dual Scan Color
w/170MB HDD
$2195

$1395



CompuAdd

486SLC-25
4MB/80MB H. D. D.
9600/2400 FAX-Modem
DOS, Windows, WinFax-Lite
Math-Coprocessor
Trackball Built-In
w/120MB
$1395

$1295

•MULTI-MEDIA•

SONY MULTI-MEDIA Package
Sony Double Speed CD-ROM Drive
Amplified Speakers Lab-Tech (pair)
6 CD-TITLES
Smart-CD Pak (speed CD-ROM up to 30 times)
16-Bit Sound Card (True 16 Bit)

$325

Ask us about Free-Software Package w/Complete Systems Service, Repair, Maintenance Experts • Ask us about 3,6, or 12 month interest free financing (Quick Approval)

Nobody beats CYGMA system prices & quality

VESA Local Bus Stations

486DX2-66 MHz $689	486DX2-50MHz $549
486DX-33MHz $489	486SLC-66MHz $459

Systems Include:
Super Mini-Tower Case
256KB Cache W/486DX or DX2 Systems
200 Watt Power Supply
1MB RAM
1.44 MB Floppy Drive
Super IDE Controller (1:1)
2 Serial/1Parallel/1 Game Port
Real- time Clock & Calendar
101 Enhanced Keyboard
1 Year Warranty
Life-Time Labor Warranty
72 Hour Burn-In Test

486DX2-66MHz $675	486DX-33MHz $469
486DLC-33 $239	486DX2-50MHz $529
386SX-40MHz $199	386DX-40MHz $225

NETWORKING EXPERTS-CALL FOR CONSULTATION

Monitors

SVGA 14" (.39)	$195
SVGA 14" (.28)	220
SVGA 14" (.28) NON-INTERLACED	245
SVGA 15" (.28) Non-Inter, Low-Rad, Flat	359
SVGA 17" NON-INTERLACED	635

Hard Disks

85MB IDE DRIVE	CALL
120MB IDE DRIVE	CALL
210MB IDE DRIVE	CALL
250MB IDE DRIVE	205
340MB IDE DRIVE	259
420MB IDE (10.5 m.s.)	289
500MB IDE (12 m.s.)	395

RAM

1M TO 2M	CALL
2M TO 4M	CALL
1M TO 4M	CALL
4M SIMM	CALL
1.2M FDD	CALL

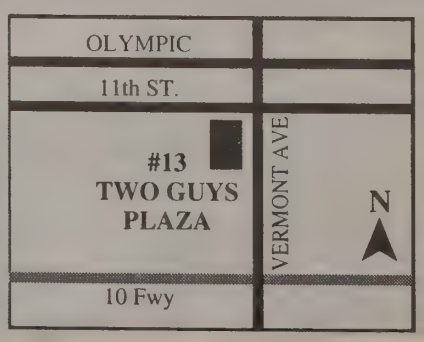
Modems & Accesories

MOUSE	$8
TRACKBALL	20
MODEM	29
FAX MODEM	37
SONY DOUBLE SPEED CD	169

NETWORKING SPECIALIST

Printers & Scanners

PANASONIC 2123	$225
PANASONIC 2624	365
PANA LASER 4410	539
HP LASER 4 & 4L	Call
HP DESKJET 500, 500C, 550C	Call
EPSON PRINTERS	Call



M-F 9am-7pm Sat 10am-6pm

VISA MasterCard

Toll Free Sales Hot Line
1-800-700-7331

CYGMA COMPUTER

1133 S. VERMONT AVE. #13
Los Angeles, CA 90006

TECH SUPPORT 213. 368-7331 • FAX 213. 368-7335

PRICE BASED ON CASH DISCOUNT • PRICE MAY CHANGE WITHOUT NOTICE
Cygma Is Not Responsible For Any Typographical Errors

NETWORKING, MULTI MEDIA,

OUR ENERGY GOES INTO EXCELLENCE

SERVICE, SUPPORT & TRAINING

Multimedia Basic Kit

Double Speed CD ROM
16-Bit Sound Card
Multimedia Speakers
12 CD Titles
$325

1 year parts WARRANTY 3 years labor

Pentium 60MHz ... $2395

- Intel 64-Bit Pentium Processor
- 512K Cache
- 8MB RAM
- 420MB IDE Hard Disk
- Teac 1.2MB Floppy Drive
- Teac 1.44MB Floppy Drive
- Diamond Stealth VL Bus Windows Accelerator
- 15" SVGA Non-Interlace Monitor (1280x1024NI, 72Hz)
- 32-Bit VLB IDE Cont w/2 Serial, 1 Parallel, 1 Game
- 101-Key Enhanced Keyboard
- Hi Resolution Mouse
- Mid Tower Case with 230W Power Supply

VESA LOCAL BUS SYSTEMS

486DX2-66 ..... $1335
486DX-40 ..... $1225
486DX-33 ..... $1195

Call for Upgrades

- 256K Cache
- P24T/Overdrive Ready
- 4MB RAM (70ns)
- 270 MB IDE Hard Drive
- Teac 1.2MB Floppy Drive
- Teac 1.44MB Floppy Drive
- 14" SVGA Non-Interlaced Monitor (1024x768, .28mm)
- 32-Bit VL Bus Windows Accelerator Card (1MB Exp. to 2MB 16.7 Million Colors, 1280x1024)
- 2 Serial, 1 Parallel, 1 Game Port
- 101-Key Enhanced Keyboard
- Hi Resolution Serial Mouse
- Mid Tower Case with 230W Power Supply
- Full Tower Case w/250W Power Supply

w/Dual Fan..... .....Add $65

Multimedia Pro Kit

NEC 3X Speed CD ROM
MediaVision Spectrum 16
Multimedia Speakers
12 CD Titles
$549

MONITOR

Arcus Mono 14" Monochrome Monitor	$95
MGC 1439, 14" 1024x768; .39mm	$205
MGC 1402, 14" 1024x768; .28mm	$226
MGC 1402N, 14" 1024x768; NI; .28mm	$239
MGC 1506E, 15" 1280x1024;NI; 28mm	$349
MAG MX15F, 15" 1280x1024; NI; 28mm	$475
MAG MX17F, 17" 1280x1024; NI; .26mm	$895
NEC 3FGe, 15" 1024x768; NI; 28mm	$595
NEC 4FGe, 15" 1024x768; NI; .28mm	$675
CTX 1760LR, 17" 1280x1024; NI; .28mm	$675

MOTHERBOARD

486SX-33 Intel (AMI) 256K VESA Local Bus	$190
486DX-33 Intel (AMI) 256K VESA Local Bus	$350
486DX-33 Cyrix (AMI) 256K VESA Local Bus	$285
486DX-40 AMD (AMI) 256K VESA Local Bus	$320
486DX2-66 Intel (AMI) 256K VESA Local Bus	$485
486DX2-66 AMD (AMI) 256K VESA Local Bus	$440

FLOPPY DRIVE

Teac 1.2MB (5 1/4")	$49
Teac 1.44MB (3 1/2")	$37
Teac Combo (1.2MB + 1.44MB)	$110

BOARD AND CONTROLLER

GoldStar 16-Bit 2HD/2FD + (2S, 1P, 1G)	$14
SIS 32-Bit VL Bus 2HD/2FD + (2S, 1P, 1G)	$29
Promise 32-Bit VL Bus Caching 4HD/2FD	$127
Winbond 8-Bit I/O Card	$12

Video Card

Monochrome Graphics Card	$16
256K 16-Bit VGA Card	$28
512K 16-Bit VGA Card	$41
1MB 16-Bit VGA Card	$59
1MB 32-Bit Cirrus 5428 Windows Accelerator	$80
2MB 32-Bit Cirrus 5428 Windows Accelerator	$130
1MB 32-Bit Diamond Stealth	$155
2MB 32-Bit Diamond Viper	$360

FAX/MODEM

Smartlink 9600/2400 Fax/Modem Int	$40
Smartlink 14.4K/14.4K Fax/Modem Int	$115
U.S. Robotics 14.4K Fax/Modem Int	$155

TAPE BACKUP

Colorado DJ-10 120MB Int	$110
Colorado DJ-20 250MB Int	$170
Colorado Trakker 250MB EXT	$375

CASE

Mini Tower Case with 230W	$40
Desktop Case with 230W	$44
Mid Tower Case with 230W	$64
Full Tower Case with 250W	$86

HARD DRIVE

WD 270MB IDE 12ms	$245
Conner 340MB IDE 12ms	$275
W.D. 420MB IDE 12ms	$295
Seagate 540MB IDE 10ms	$420
Micropolis 1GB IDE 10ms	$795

MEMORY

1x3 70ns	$Call
4x9 70ns	$Call
4x9 60ns	$Call
1x36 70ns	$Call
4x36 70ns	$Call

CD ROM

NEC 3XI Triple Spin 195ms/450KB/S	$365
Panasonic Double Spin 320ms/300KB/S	$165

SOUND CARD

Sound Blaster 16 Basic	$110
Sound Blaster 16 MCD	$165
Sound Blaster 16 SCSI-2	$180
Audio Spectrum 16	$135

CD TITLE

Call for list and prices.

SPEAKER

Amplified Shielded 80 Watt	$65
Amplified Shielded 25 Watt	$50
Amplified Shielded 8 Watt	$20

THETA

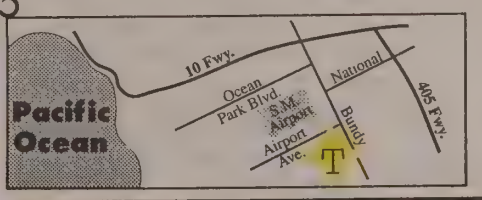
THETA COMPUTER
CORPORATION OF AMERICA

3200 Airport Ave. #22 • Santa Monica • CA 90405

(310) 572-1613

FAX # (310) 572-1615

Business Hours:
M-F; 9:00A.M.- 6:00P.M.
& Sat. 10A.M. - 4P.M.



Prices include 3% cash discount. Prices & Specifications are subject to change without notice.
*Not responsible for any typographical errors. .

MICROMARKETPLACE

Service, Support, Quality, & Price.

386/486SX Series

386SX/33MHz	$379
386SX/40MHz	$389
486SX/25MHz	$479

386DX Series

33MHz/64K Cache	$429
40MHz/128K Cache	$439

486DX Series

DX33MHz/256K Cache	$679
DX50MHz/256K Cache	$829
DX2-50MHz/256K Cache	$809
DX2-66MHz/256K Cache	$879

SYSTEMS INCLUDE :

- 1MB Memory
- Digital Mini-Tower Case
- 220W P/S (115/230V)
- 2S/1P/1G Ports
- IDE FD/HD Controller
- 1.2MB or 1.44MB FD
- Super VGA Card
- 14" P/W SVGA Monitor
- 101 Enhanced Keyboard
- Clock/Calendar w/B.B.U.
- Hi-Res. Mouse & Software
- Operational Manual

- FULL ONE YEAR WARRANTY
- LIFETIME CUSTOMER SUPPORT
- BUY DIRECT & SAVE

486 VESA Local Bus

Pentium Overdrive for Future Upgrade

- 256K Ultra Fast Cache
- 3 VESA Local Bus Slot
- 4MB RAM Installed
- 64MB Expandable
- Intel Math Coprocessor
- 8K Cache Int.
- 2S/1P/1G
- 1.2 & 1.44MB FD
- 256MB HD 13ms W/128K Cache
- 32 Bit VESA Local Bus FD/HD Controller
- Hi-Res. Mouse
- 101 Keyboard(Japan)
- Non-Interlaced .28 VESA Super VGA Color Monitor
- 32 Bit VESA Local Bus Super VGA Card W/1MB (Windows Accelerator, 1280x1024, 16.7M Color)
- Clock/Calendar w/B.B.U.
- Operation Manual
- Digital Mid-Size Tower Case
- 230W P/S (110/230V)

INTEL DX 33/50MHz .... $1299/$1449

INTEL DX2/66MHz $1499

MONTHLY SPECIAL

386SX/40MHz SYSTEM

- 2MB RAM Installed
- 16MB Expandable
- 1.2MB or 1.44MB FD
- 213MB HD 13ms w/128K Cache
- IDE FD/HD Controller
- 2S/1P/1G
- Hi Res. Mouse
- 101 Enhanced Keyboard
- Super VGA Color Monitor
- Clock/Calendar w/Battery Bkup
- Super VGA Card w/512K
- Operation Manual
- Digital Mini Tower Case
- 220W P/S (110/230V)

$749

486 EISA/VESA Local Bus

Pentium Overdrive for Future Upgrade

- 256K Ultra Fast Cache
- 8MB RAM Installed
- 32MB Expandable
- Intel Math Coprocessor
- 8K Cache Int.
- 1.2 & 1.44MB FD
- 425MB HD 13ms W/128K Cache
- 32 Bit VESA Local Bus FD/HD Controller
- 2S/1P/1G+Hi-Res. Mouse
- 101 Keyboard (Japan)
- Non-Interlaced .28 VESA Super VGA Color Monitor
- 32 Bit VESA Local Bus Super VGA Card W/1MB (Windows Accelerator, 1280x1024, 16.7M Color)
- Clock/Calendar w/B.B.U.
- Operation Manual
- Digital Full-Size Tower Case
- 250 W P/S (110/230V)
- A.C. Surge Protector

INTEL DX/33MHz. $1599

INTEL DX2/66MHz $1799

MOTHER BOARD QTY 10

386SX-33 W/CPU	$56
386SX-40 w/CPU	59
386-40 W/128K W/CPU	94
VLB 486SX-25 W/CPU	149
ISA 486-33/66 W/256K	84
VLB 486-33/66 W/256K	89
EISA/VLB 486-33/66 W/256K	159

CASE & P/S

Digital Mini Tower W/220W	$34
Digital Med. Tower W/230W	54
Digital Full Tower W/250W	69

HARD DRIVE QTY 10

IBM 60MB 19ms SCSI	$149
W D 213MB 13ms IDE	189
W D 256MB 13ms IDE	214
W D 341MB 13ms IDE	259
W D 425MB 13ms IDE	299
W D 540MB 11ms IDE	399
Fujitsu IGB10ms SCSI2	779

FLOPPY DRIVE

1.2MB NEC	$40
1.44MB NEC	33

★ NOTEBOOK/MULTIMEDIA...CALL FOR BEST PRICE! ★

MONITOR/CARD QTY 10

Miracle 14" P/W SVGA	$89
Everview .39 SVGA	189
KENITEC .28 SVGA	214
VS .28 SVGA N/I VESA	239
KENITEC 17" SVGA N/I	579
MGP	9
HMC 256K SVGA	22
Oak 1MB SVGA	45
Windows Acc. 1MB SVGA	51
Windows Acc. 1MB VLB	69

KEYBOARD

Mitsumi 101/102 Enhanced	$19
Spanish 101/102 Enhanced	19

NETWORK QTY 10

8 Bit Arcnet Star	$39
16 Bit Arcnet COMBO	49
16 Bit Ethernet Coax	34
16 Bit Ethernet 10 Base T	39
4 Port Passive Hub	4
8 Port ACTIVE HUB	129

FAX/MODEM

2400 Int. Modem	$21
9600/2400 Int. Fax/Modem	32
14.4/14.4 Int. Fax/Modem	99

*ADD 3% QTY LESS THAN 10
*ADD 10% QTY LESS THAN 5

DEPOT REPAIR

- Fast, Reliable & Guaranteed
- Volume Accounts, Call For Special Pricing!!!
- Call For Other Depot Solutions To On-Site Maintenance

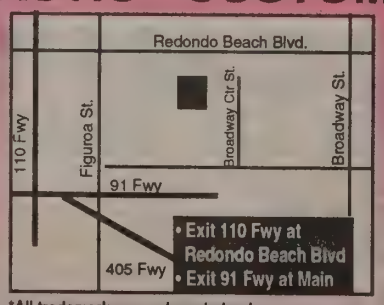
DATA GENERAL • BLOWER MOTORS • SPINDLE MOTORS LINEAR MOTORS • R/W HEADS • DISK DRIVES • TAPE DRIVES CRTs • PRINTERS • CPUs MEMORIES • COMMUNICATIONS **CAD/CAM** • TEKTRONIX • MITSUBISHI • V.M.I. • RAMCOM **PERSONAL COMPUTER** • IBM-PC/XT/AT & COMPATIBLE • COMPAQ • LEADING EDGE • APPLE • AST • WYSE • LINK

WE DO: NOVELL • LANTASTIC • CUSTOMIZE • UPGRADE • CD ARCHIVES

GATETRONIX Control Systems Inc.

Hardware & Software Services
15541 Broadway Center Street, Gardena, CA 90248
BROADWAY CENTER BUSINESS PARK
(corner of Broadway & 157th St.)

Tel: (310) 715-6086
Fax: (310) 715-6649



*All trademarks are acknowledged
**All GCS Systems are fully assembled & tested.
Prices subject to change without notice.

GCS/ALL Micro Services

Valencia Industrial Park
27720 Avenue Scott
Unit 180
Valencia, CA 91355

(818) 972-9832
(805) 257-1925

GCS/Power Management

163 W. Bonita, Suite A
San Dimas, CA 91773

(909) 394-5969

MICRO MARKETPLACE

We Offer The Best:

- *72 Hrs Fully Tested and Burn in
- *1 Year Part & 3 Years Labor
- *MS DOS 6.2 & Windows 3.11
- *Systems are 100% IBM Compatible
- *Free Works for Windows: DataBase, Communication, SpreadSheet, WordPerfect, Label Maker & Address Book
- *Custom Configure System to Meet Your Needs
- *System Upgrade Available
- *All Prices are 3% Cash Discount
- *Price Subject to Change without Notice

Special Thanks:

Allen-Bradley
BBB of Utah
DMV
Home Saving of America
KJLH

Monthly Specials

Ethernet 16 Bit (NE 2000)	$36
Ethernet 16 Bit (T/C)	39
Mini Tower Case w/200W Power Supply (UL) w/LED Display	36
Mid Tower Case w/250W Power Supply (UL) w/LED Display	55
Super VGA Graphic Adapter 1MB w/Windows Accelerator	55
14" SVGA Color .28 dp NI Monitor Edge to Edge Energy Saving	240
Motherboard Vega 486 VESA Local Bus w/256K Cache & Bus Master w/Zif (USA)	169
Hard Drive 345MB IDE	265
420MB IDE	295
540MB IDE	415
Multimedia Kit	355
Includes: Panasonic Double Speed CD ROM 562, 16 Bit Stereo Sound Card/4 CD Titles/2 LabTec Amplified Stereo Sound Speakers	
Fax Modem 9600/2400 Internal	37
Fax Modem 14.4 Internal	119
Tape Backup 250MB w/Cartridge & Software	159

Welcome:Corporate, Government & School P.O.s'
Providing the Good Quality & the Best Service is our Goals We Do LANS, Novell NetWorking

MDS Jaguar P5

- *Intel Pentium P5 60/66MHZ MB
- *Intel Pentium 64 Bit CPU
- *512K Write Back Cache
- *4 ISA Slots
- *2 Vesa Local Bus Slots
- *8MB Ram Exp. to 128MB
- *Maxtor 540MB IDE Hard Drive
- *ATI Ultra PCI Graphic Card
- *Teac 5.25" 1.2MB Floppy
- *Teac 3.5" 1.44MB Floppy
- *PCI Controller Card
- *2 Serial, Parallel, Game
- *129 Key Programmable Keyboard
- *5 Bay Fancy Digital Full Tower
- *250 Watt UL Power Supply
- *MicroSoft Mouse w/Pad

intel inside

iNTEL Pentinum P5-60MHz	$2553
iNTEL Pentinum P5-66MHz	$2953
15" ViewSonic .28 dpi NI	$ 450
17" ViewSonic .26 dpi NI	$ 950

MDS Advanced System

- *256K Cache & 3 Vesa Slots
- *OverDrive UpGradable Socket
- *Build in Math Co-Processor
- *4MB Ram (Japan/Korea Made)
- *170MB IDE Hard Drive
- *Teac 3.5" 1.44MB Floppy
- * Floppy/Hard Drive Controller
- * 2 Serial, Parallel, Game
- *Hi-Color w/1MB SVGA Card
- *Mini Fancy Vertical Desktop Digital Case w/230W PS
- * 14" .28 dp NI Energy Saving 1024 x 768 SVGA Monitor
- *101 Non-Click Keyboard
- *Free 3-Button Mouse w/Pad

intel inside

486SX-25	$ 950
486SX-33	$ 985

MDS Leopard VL-Bus

- *256K Cache & 3 Vesa LB Slots
- * OverDrive Upgradable Socket
- *Built in Math Co-Processor
- *4MB Ram (Japan/Korea)
- *345MB IDE Hard Drive
- *Teac 5.25" 1.2 MB Floppy
- *Teac 3.5" 1.44MB Floppy
- *32 Bit VLB Dual Floppy/Hard Controller
- *32 Bit VLB 16.7 Million SVGA Card
- *14" .28 dp NI Energy Saving Edge to Edge SVGA Monitor
- *Fancy Digital Vertical Case
- *230 Watt UL Power Supply
- *Focus 101 Enhanced KeyBoard w/Hard Cover
- *Free 3-Button Hi-Res Mouse & Pad

intel inside

486SX-33	$1178
486DX-33	$1339
486DX-50	$1399
486DX2-66	$1448

MDS IBM 486SLC2-66

- *16K Internal Cache
- *witb Math Co-Processor
- *4MB Ram Exp. to 32MB
- *245MB IDE Hard Drive
- *Teac 5.25" 1.2MB Floppy
- *Teac 3.5" 1.44MB Floppy
- *Floppy & Hard DriveController
- *2 Serial, Parallel, Game
- *Hi-Color w/1MB w/Win. Accel Graphic Card
- *14" .28 dpi NI Digital Control 1024 x 768 SVGA Monitor
- *101 Non-Click KeyBoard
- *Free 3-Button Mouse w/Pad

IBM486SLC2-66	$1068
IBM486SLC2-66VLB	$1188

MDS Tiger VL-Bus

- *256K Cache & 3 Vesa LB Slots
- *OverDrive UpGradable Socket
- *Built in Math Co-Processor
- *4MB Ram (Japan/Korea Made)
- *245MB IDE Hard Drive
- *Teac 5.25" 1.2MB Floppy
- *Teac 3.5" 1.44MB Floppy
- *32 Bit VLB Dual Floppy/Hard Controller
- *32 Bit VLB 16.7 Million SVGA Card
- *14" .28 dp NI Energy Saving Edge to Edge SVGA Monitor
- *Fancy Digital Vertical Case
- *230 Watt UL Power Supply
- *Focus 101 Enhanced KeyBoard w/Built in TrackBall

Am486

486DX-40	$1228
486DX2-50	$1252
486DX2-66	$1378

MDS Beginner System

- *128K Cache
- *2MB Ram (Japan/Korea Made)
- *170MB IDE Hard Drive
- *Teac 3.5" 1.44MB Floppy
- *Floppy/Hard Drive Controller
- *2 Serial, Parallel, Game
- *Hi-Color 1MB SVGA Card
- *14" .28 dp NI Energy Saving 1024 x 768 SVGA Monitor
- *Fancy Digital Vertical/DeskTop
- *230 Watt Power Supply
- *101 Non-Click KeyBoard
- *Free 3-Button Mouse w/Pad

386DX-40 (AMD)	$830
486DLC40 (Cyrix)	$888

MDS Office System

- *25MHz 486SX Intel CPU
- *OverDrive UpGradable Socket
- *256K Cache & 3 Vesa Slots
- *Built in Math Co-Processor
- *4MB Ram (Japan/Korea)
- *245MB IDE Hard Drive
- *Teac 3.5" 1.44MB Floppy
- *Floppy & Hard Drive Controller
- *Mono-Chrome Card
- *14" Mono-Chrome Monitor
- * Fancy Vertical/DeskTop Case
- * 230 Watt Power Supply
- * Focus 101 Enhanced Keyboard w/Hard Cover
- * Free 3-Button Hi-Res Mouse & Pad

Only $799

CD Titles:

Business:

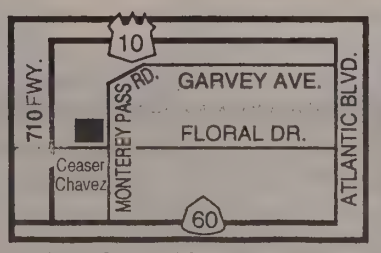
American Business Phone Book	$18
Business Library	$18
Career Opportunites	$35
ClipArt Library	$18
Int'l Business/Economic Atlas	$25
Lotus 1-2-3	$58
MicroSoft Works	$38
North American Fax Book	$35
Photo CD (Tempra)	$15
Photo CD (Kodak)	$15
Programmer Power Tools	$18
Publish It 2.0	$20

Education:

Animals Encyclopedia	$35
Bring the World to your Senses	$15
Compton's Encyclopedia	$45
Compton's Interactive Encyc.	$103
Family Doctor	$22
Musical Instruments	$80
Mayo ClinicFamily Health Book	$22
Travel Companion	$25

Many Other CD -Titles Available, Please Call!!!

Micro Discover System



1455 Monterey Pass Rd., #104 • Monterey Park, CA 91754

VISA
MasterCard

Tel: (213) 262-0309
FAX: (213) 262-6316
(Open 7 Days)
Mon.-Fri. 9:00-6:00
Sat. 10:00-3:00
Sun. 1:00-5:00
Prices subject to change without notice.
All prices are C.O.D. cash.

Wake Up & Smell the Wholesale Price

Comming Soon More Locations

486 Power System

Intel 486 Microprocessor
Built-in Math Co Processor
Digital Minitower case
256kb Cache, 3VL BUS
2MB Ram(Exp. to 64MB)
1.2 & 1.4MB FDD
2S/1P/1G Ports
101 Click Enhanced Keyboard
Super VGA Card
210MB 13 ms IDE HDD
14" .28 SVGA Monitor

486DX-33 $999
486DX2-66 $1165

3VESA Local Bus 486

Intel 486 Microprocessor
Built-in Math Co Processor
Digital Minitower case
256kb Cache,3VL Bus
4MB Ram(Exp. to 64MB)
1.2 & 1.4MB FDD
32Bit VL 2S/1P/1G Ports
101 Click Enhanced Keyboard
SVGA VL Accelerator card w/ 1MB
(16.7 Million Color)
250MB 13 ms IDE HDD
14" .28 SVGA Monitor

486DX-33 $1125
486DX2-66 $1295

IBM486SLC2/66-VLB

IBM486SLC2/66MHz CPU
Built-in Math Co Processor
Digital Minitower case
32KB Cache(Optional 128KB)
4MB Ram(Exp. to 32MB)
1.2 & 1.4MB FDD
32Bit VL 2S/1P/1G Ports
101 Click Enhanced Keyboard
SVGA VL Accelerator card w/ 1MB
(16.7 Million Color)
250MB 13 ms IDE HDD
14" .28 SVGA Monitor

$1125

HOT Multi-Media Package $299

Panasonic Double Speed CD + True 16Bit Sound Card
Speaker & Microphone + 4 CD Title & Software included

We Deliver Within 25Miles Radius
When purchasing a complete system

MOTHER BOARD W/ CPU

386-40SX MHZ	$ 65
386-40DX 128KB CACHE	$ 99
386-40DX VESA VLB 256KB	$ 179
486SLC2/66 IBM W/MATH-CO. VL BUS	$ 295
486-40DLC 128KB W/MATH-CO	$ 195
486-40DLC VESA VLB 256KB W/MATH-CO	$ 220
486DX-33/50/66DX2 INTEL 256K CACHE	$ 365/$499/$475
486DX-33/50/66DX2 INTEL 3VESA VLB 256KB (PENTIUM READY, UPTO 64MB RAM)	$ 379/$509/$480
486DX-33/50/66DX2 INTEL 3VESA VLB 256KB (ZIP SOCKET, P5 READY UP TO 64MB RAM)	$ 385/$519/$490
VESA/PCI 486DX 33/50/66DX2 W/256KB	CALL

HARD DISK BIG SALE !!!

170MB IDE	$ 185
200MB IDE	$ 199
245MB IDE	$ 225
340MB IDE	$ 279
420MB IDE	$ 399
520MB IDE	$ 460
1.2GB IDE	Call
340MB SCSI	
520MB SCSI-II 12MS	
1.2GB SCSHI	
3.0GB SCSHI	

I/O CARD

AT I/O 2S,1P,& 1G	$ 10
AT I/O SUPER IDE	$ 16
AT I/O VESA VLB W/IDE	$ 29

GRAPHIC CARD

MGP	$ 13
VGA 256KB CARD	$ 29
VGA 512KB CARD	$ 38
SVGA W/ 1MB	$ 59
DIAMOND STEALTH 24 VLB W/ 1MB	$ 159
CIRRUS LOGIC VLB W/1MB	$ 89
TRIDENT VLB W/1MB	$ 79

BAREBONE SYSTEM

486DX2/66 256KB VLB	*$599*
486DX50 256KB VLB	*$589*
486DX33 256KB VLB	*$449*
486SLC2/66 64KB VLB	*$399*
486SLC2/66 64KB ISA	*$349*
486DLC40W/MATH-CO	*$265*
486SLC33	*$195*
386DX40	*$189*
386SX40	*$179*

THIS SYSTEM INCLUDES
DIGITAL MINITOWER
200 W POWER SUPPLY
1.44MB FD
SUPER IDE I/O CTRL (2S,1P,1G,FDD,IDE)
101 CLICK KB

FAX/MODEM

2400 INTERNAL MODEM	$ 29
9600/2400 FAX/ MODEM	$ 45
14400 BPS FAX/ MODEM	$ 129

MONITOR

14" Monochrome TTL	$ 79
Monochrome VGA	$ 98
.39 14" SVGA	$ 190
.28 14" SVGA	$ 219
.28 14" N/I SVGA	$ 239

MULTI-MEDIA MANIAC

PANASONIC 562 DOUBLE SPEED	$ 165
SONY 33A DOUBLE SPEED	$ 165
MITSUMI FX001D DOUBLE SPEED	$ 165
TOSHIBA 3401B SCSI INTERNAL	$ 360
TOSHIBA 3401E SCSI EXTERNAL	$ 485
AT BUS CD-ROM CTRL. FOR 3 TYPE	$ 18
SOUNDBLASTER PRO II DELUX	$ 115
SOUNDBLASTER 16 MCD	$ 175
MOZART SOUND 16	$ 125
MEDIAVISION PRO AUDIO 16 BIT	$ 145
SOUND PRO 16(A)	$ 85

CONTROLLER

16BIT AT TO SCSI CONTROLLER	$ 74
16BIT SCSI TAPE BACKUP CONTROLLER	$ 161
16BIT SCSI HD/FD KIT PLUS	$ 199
SCSI HD/FD CONTROLLER	$ 203
SCSI HD/FD CONTL W/ DRIVER	$ 249
EISA TO SCSI HD/FD CONTROLLER	$ 324
EISA TO SCSI HD/FD CONTROLLER W/DRIVER	$ 353
PROMISE IDE HD/FD CACHE CONTROLLER	$ 101
PROMISE IDE/FD/IO CACHE CTRL W/ 0K CACHE	$ 137
SCSI/IDE/FD CACHE CTRL W/ 0K CACHE	$ 165
VESA IDE/HD/FD W/ 0K CACHE	$ 132
ULTRASTOR 16BIT ESDI HD/FD CTRL	$ 163
ULTRASTOR SCSI HD/FD BUS MASTERING CTRL	$ 209
ULTRASTOR EISA SCSI HD/FD CTRL	$ 308

Open Monday through Friday 8:30AM to 5:30 PM
Saturday 10:00 AM to 4:00 PM

NOVELL®

VISA/MASTER
We honer Government, Corporate & School PO

All of accessories are also available, CASE,KEYBOARD,TAPE BACKUP,MOUSE,Etc..

MELCO International Group

TEL (310) 907-1180 . FAX (310) 907-1186

12035 Burke St.. Suite # 3 , Santa Fe Springs , CA 90670

L.A. MICRO

TO ORDER CALL 1-800-TO-LA MICRO

Tel: 714-523-9495 Fax: 714-523-2017

Complete Network Solution

1 FILE SERVER
486DX2-66 MHz System

- 4MB Memory
- 340MB Hard Drive
- 1.44MB Floppy
- Mono Monitor
- Monochrome Card
- 101 Enh. Keyboard
- Mini Tower Case
- 32 BIT IDE VESA LB
- 16 BIT NE2000 Comp. Network Card

INCLUDING: Novell Netware 386 v3.12 Fully Licensed for 5 Users

Novell Certified NetWare Engineer

$4950

3 WORKSTATIONS
386DX-40 MHz System

- 128K Cache
- 4MB Memory
- 1.44MB Floppy
- SVGA Monitor .28DPI
- IDE I/O Card
- 2 Serial/1 Parallel/1 Game
- SVGA Card w/1MB RAM
- Mini Tower Case
- 101 Enh. Keyboard
- 400 DPI Serial Mouse
- 16 BIT NE 2000 Comp. Network Card

Benefits analysis, consulting, hardware & software, training, system administration and maintenance.

Network Cards

Ethernet 10 Base-T/COAX

3C509 Eterlink III ISA 16-bit (3COM)	$119
Ether-16C 10 Base2 BNC (COAX), Jumperless	$49
Ether-16T 10 Base-T RJ45 (Twisted P), Jumperless	$49
Ether-16CT BNC & RJ45 Combo, Jumperless	$55
En-2A PS/2 (MCA) Ethernet Combo	$165

Network Hubs

8-Port 10BaseT Concentrator	$165
12-Port 10BaseT Concentrator	$295
16-Port 10BaseT Concentrator	$395

Novell Netware

Netware 3.12 5 Users 3.5"	$620
Netware 3.12 10 Users 3.5"	$1395
Netware 3.12 25 Users 3.5"	$1925
Netware 3.12 50 Users 3.5"	$2559
Novell Personal Netware 2 Users Starter Kit	$198

486DX-33 VESA LB $1154

486DX-33 MHz Intel Processor

- 4MB FAST RAM, 256K Cache Memory
- 245MB 14ms IDE Hard Drive
- 1.2MB and 1.44MB (3.5") Floppy Drive
- VESA 32-Bit Local Bus IDE I/O
- INTEL PENTIUM TECHNOLOGY READY
- SVGA VESA LB 32-Bit Windows Accelerator (16.7M Colors, 1MB)
- 14" Color SVGA N.I. Monitor, .28 DP
- Mini Tower Case with LED
- 400 dpi High Resolution Serial Mouse
- 101 Enhanced Keyboard

FREE MOUSE

intel inside

486DX-50 VESA LB $1375

486DX-50 MHz Intel Processor

- 4MB FAST RAM, 256K Cache Memory
- 345MB 13ms Hard Drive
- 1.2MB and 1.44MB Floppy Drive
- VESA 32-Bit Local Bus IDE I/O
- INTEL PENTIUM TECHNOLOGY READY
- SVGA VESA LB 32-Bit Windows Accelerator (16.7M Colors, 1MB)
- 14" SVGA .28 Monitor 1280x1024
- Mid Tower Case with LED
- 400 dpi High Resolution Serial Mouse
- 101 Enhanced Keyboard
- Dual Cooling Fan Case w/CPU Heat Sink

FREE MOUSE

486DX2-66 VESA LB $1667

486DX2-66 MHz Intel Processor

8MB FAST RAM, 256K Cache Memory
420 MB (Super Fast) Hard Drive
15" SVGA Flat N.I .28 DP Monitor

- 1.2MB and 1.44MB Floppy Drive
- VESA 32-Bit Local Bus IDE I/O
- INTEL PENTIUM TECHNOLOGY READY
- SVGA VESA LB 32-Bit Windows Accelerator (16.7M Colors, 1MB)
- Mid Tower Case with LED
- 400 dpi High Resolution Serial Mouse
- 101 Enhanced Keyboard
- Dual Cooling Fan Case w/CPU Heat Sink

BEST BUY

ALSO AVAILABLE IN EISA VESA!

Super Buy!

Multi Media

Creative Labs Dual Speed CD-ROM by Panasonic
*** Sound Blaster 16 ***

Two 15 Watt Speakers & 6 CD Titles

★ $329 ★

COLORADO
TAPE BACK-UPS
internal
JUMBO
250MB
$142

DAT Drives
SONY DDS Tape Drives

2.0 Gigabytes
DAT Drive
3.5" DDS Drive 2.0 Gigabyte Storage Capacity, Reliable Mechanism Designed
$795

4.0 Gigabytes
Tape Drive
3.5 DDS Tape Drive with Embedded SCSI Controller
4.0 Gigabyte Storage Capacity
$885

7 Day Money Back Guarantee
1 Year Parts-Lifetime Labor Warrantee

Financing Available
No Financing Charge for 90 Days
-Ad Reflects Cash Price Only-

6277 MANCHESTER BLVD. • BUENA PARK, CA 90621

PRICES & SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
HOURS: MONDAY–FRIDAY 10AM TO 6PM, SATURDAY 10AM TO 3PM

MICRO MARKETPLACE

Top Quality Product You Want At Prices You Can't Beat!

ADVANCE PRO TECHNOLOGY

15439 PROCTOR AVE.
CITY OF INDUSTRY,CA 91745
TEL: (818)336-8960
FAX: (818)336-3221

Mon. - Fri. 9:00 am - 6:00 pm
Sat. 10:00 am - 4:00 pm
Sun. - by appointment

486DX2-66/DX-50/DX-33 VESA-VL MULTI-MEDIA ADVANCE

- INTEL 80486DX CPU • 8 MB RAM 72-PIN
- 256K CACHE MEMORY • PENTIUM READY
- **CPU COOLING FAN & HEATSINK**
- TEAC 1.2 MB & 1.44 MB FDD
- **420 HARD DRIVE**
- **32 BIT VLB WINBOND IDE CTLR w/2S-P-G**
- **32 BIT VLB CL-5428 SVGA w/1MB**
- **15" SVGA MTR 1280 X 1024 .28D.P.N-I**
- 2 SERIAL, 1 PARALLEL, 1 GAME
- **DELUX FULL TOWER / MID TOWER**
- **250 WATTS POWER SUPPLY (UL)**
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON MOUSE w/PAD
- **MULTI-MEDIA KIT-TOSHIBA 3401B CD-ROM • SPECTRUM 16 SOUND CARD • SPEAKERS • 6-CD TITLES**
- **MICROSOFT DOS 6.2 w/MANUAL & DISK**

INTEL 486 DX2-66 $2278.00
INTEL 486 DX-33 $2138.00

▶ **MULTI-MEDIA PRO**
w/ NEC 510 TRI-SPEED CD ROM

INTEL 486 DX2-66 $2318.00
INTEL 486 DX-33 $2178.00

486DX2-66/DX-50/DX-33 VESA-VL MULTI-MEDIA STANDARD

- INTEL 80486DX CPU
- 256K CACHE MEMORY • PENTIUM READY
- 4 MB RAM 72-PIN (EXP TO 128MB)
- TEAC 1.2 MB & 1.44 MB FDD
- **420 HARD DRIVE**
- **32 BIT VLB WINBOND IDE CTLR w/2S-P-G**
- **32 BIT VLB CL-5428 SVGA w/1MB**
- **14" SVGA MTR 1024 X 768 .28D.P.N-I**
- **DELUXE MID TOWER CASE**
- **235 WATTS POWER SUPPLY (UL)**
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON MOUSE w/PAD
- **MULTI-MEDIA KIT-DUAL SPEED SONY CD-ROM • SPECTRUM 16 SOUND CARD • SPEAKERS • 6-CD TITLES**
- **MICROSOFT DOS 6.2 w/MANUAL & DISK**

INTEL 486 DX2-66 $1798.00
INTEL 486 DX-33 $1668.00

MULTI-MEDIA SPECIAL

- 4 MB RAM (EXP. TO 32MB)
- **1.44 MB FDD**
- **210MB IDE HDD**
- IDE CTLR W/2S-P-G
- **SVGA GRAPHIC CARD W/512K**
- **14" SVGA MTR 1024 X 768 .39D.P.**
- **DELUX MINI TOWER W/235W P.S.(UL)**
- **101 KEY ENHANCED KEYBOARD**
- **3 BUTTON MOUSE**
- **MULTI-MEDIA KIT-DUAL SPEED SONY CD-ROM • SPECTRUM 16 SOUND CARD • SPEAKERS • 6-CD TITLES**

486 DLC-40 $1158.00
w/128K CACHE

IBM 486 SLC2-66 $1298.00
w/64K CACHE

VESA LOCAL BUS ADVANCE

- INTEL 80486DX CPU
- **4MB 30-PIN RAM (EXP TO 32MB)**
- 256K CACHE MEMORY • PENTIUM READY
- **CPU COOLING FAN & HEATSINK (DX2-66)**
- TEAC 1.2 MB & 1.44 MB FDD
- **420MB IDE HARD DRIVE**
- **32 BIT VLB WINBOND IDE CTLR w/2S-P-G**
- **32 BIT VLB CL-5428 SVGA w/1MB**
- **14" SVGA MTR 1024 X 768 .28D.P.N-I**
- **PREMIUM MID TOWER w/ 235W P.S. (UL)**
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON MOUSE w/PAD
- **MICROSOFT DOS 6.2 w/MANUAL & DISK**

INTEL 486 DX2-66 $1438.00
AMD 486 DX2-66 $1398.00
INTEL 486 DX-33 $1298.00

***PREMIUM FULL TOWER**
w/ 2 COOLING FAN.....ADD $30

VESA LOCAL BUS SCSI PRO

- **INTEL 80486DX CPU**
- 4MB 72-PIN RAM (EXP TO 128MB)
- 256K CACHE MEMORY • PENTIUM READY
- **CPU COOLING FAN & HEATSINK (DX2-66)**
- TEAC 1.2 MB & 1.44 MB FDD
- **340MB SCSI HARD DRIVE**
- **ACCULOGIC SCSI II CONTROLLER**
- **32 BIT VLB DIAMOND SPEEDSTAR PRO**
- **14" SVGA MTR 1024 X 768 .28D.P.N-I**
- 2 SERIAL, 1 PARALLEL, 1 GAME
- **DELUX FULL TOWER w/ 2 COOLING FANS**
- **250 WATTS POWER SUPPLY (UL)**
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON MOUSE w/PAD
- **MICROSOFT DOS 6.2 w/MANUAL & DISK**

INTEL 486 DX2-66 $1668.00
INTEL 486 DX-33 $1538.00

VESA LOCAL BUS SCSI MASTER

- **INTEL 80486DX CPU**
- 4MB 72-PIN RAM (EXP TO 128MB)
- 256K CACHE MEMORY • PENTIUM READY
- **CPU COOLING FAN & HEATSINK**
- TEAC 1.2 MB & 1.44 MB FDD
- **540MB SCSI HARD DRIVE**
- **32 BIT VL BUSLOGIC SCSI II CONTROLLER**
- **32 BIT VL BUS DIAMOND VIPER w/2MB**
- **15" SVGA MTR 1280 X 1024 .28D.P.N-I**
- **2 SERIAL, 1 PARALLEL, 1 GAME**
- **DELUX FULL TOWER w/ 2 COOLING FANS**
- **250 WATTS POWER SUPPLY (UL)**
- FOCUS 2001 ENHANCED KEYBOARD
- 3-BUTTON MOUSE w/PAD
- **MICROSOFT DOS 6.2 w/MANUAL & DISK**

INTEL 486 DX2-66 $2278.00
INTEL 486 DX-33 $2138.00

PENTIUM PCI LOCAL BUS 60 MHz

- **PENTIUM PCI LOCAL BUS M/B**
- INTEL PENTIUM 60 MHz CPU
- **ZIF PENTIUM SOCKET**
- 512K CACHE MEMORY
- 16MB RAM (32-BIT MEMORY)
- **CPU COOLING FAN & HEATSINK**
- TEAC 1.2 MB & 1.44 MB DUAL FDD
- **525MB SCSI HARD DRIVE**
- **PCI SCSI II CONTROLLER**
- **PCI DIAMOND VIPER 2MB VRAM**
- 2 SERIAL, 1 PARALLEL, 1 GAME
- **FULL TOWER CASE**
- **300 WATTS POWER SUPPLY (UL)**
- **MICROSOFT DOS 6.2 w/MANUAL & DISK**
- **MONITOR, KEYBOARD & MOUSE NOT INCLUDED**

SPECIAL $3238.00
- **PENTIUM PCI 66MHz** CALL

486DX2-66 EISA/VESA LOCAL BUS

- **A.I.R. EISA/VESA LB M/B w/INTEL CPU**
- 8 EISA SLOTS/3 VESA SLOTS
- **ZIF PENTIUM SOCKET • PENTIUM READY**
- 256K CACHE MEMORY
- 16MB RAM (32-BIT MEMORY)
- **CPU COOLING FAN & HEATSINK**
- TEAC 1.2 MB & 1.44 MB FDD
- **340MB SCSI HARD DRIVE**
- **ADAPTEC 32 BIT EISA SCSI II CONTROLLER**
- **DIAMOND VIPER VLB 2MB VRAM**
- 2 SERIAL, 1 PARALLEL, 1 GAME
- **FULL TOWER CASE w/2 COOLING FANS**
- **250 WATTS POWER SUPPLY (UL)**
- **MICROSOFT DOS 6.2 w/MANUAL & DISK**
- **MONITOR, KEYBOARD & MOUSE NOT INCLUDED**

SPECIAL $2698.00

486DLC 40 MHZ/368DX-40 CACHE SYSTEM

- 128K CACHE MEMORY
- 4 MB RAM
- TEAC 1.2 MB & 1.44 MB FDD
- **254MB HARD DRIVE**
- AT BUS IDE CONTROLLER
- SVGA CARD w/1MB
- 14" SVGA MONITOR 1024 X 768 .39D.P.
- 2 SERIAL, 1PARALLEL, 1 GAME
- **MID TOWER CASE**
- **235 WATTS POWER SUPPLY (UL)**
- 101 KEY ENHANCED KEYBOARD
- 3 BUTTON MOUSE

SPECIAL
486 DLC 40MHZ $928.00
386 DX-40MHZ $868.00

OPTION

PENTIUM/PCI M/B W/ 256K CACHE	$415
A.I.R. EISA/VESA LB M/B ONLY W/ 256K CACHE	$375
VESA LB 486DX M/B ONLY W/256K CACHE	$108
ISA 486DLC-40MHZ M/B W/CPU & MATH	$160
ISA 386DX-40MHZ M/B W/AMD CPU	$98
TRIDENT/OAK/CIRRUS SVGA CARD W/1MB	$58
VLB CIRRUS LOGIC SVGA W/1MB 5428	$78
VLB GENOA SVGA W/1MB	$95
VLB DIAMOND VIPER SVGA 2MB VRAM	$355
VLB ORCHID FAHRENHEIT W/1MB	$155
16 BIT IDE W/2 S-P-G WINDBOND	$14
VLB IDE HD/FD & I/O CTLR WINDBOND	$24
VLB IDE CACHE DISK ACCELERATOR	$118
AT-I/O (2S-P-G) WINDBOND	$12
MS-DOS 6.2 & MS-WINDOW 3.1	CALL
MEMORY UP-GRADE	CALL
COLORADO DJ-20 TAPE BACKUP	$165
CONNER 250MB TAPE BACKUP	$145
INTERNAL 9624 FAX MODEM	$38
INTERNAL 14400 FAX MODEM	$165
EXTERNAL 14400 FAX MODEM	$195
TEAC 1.2MB/1.44MB FDD	$48/40
TEAC DUAL 1.2/1.44MB FDD	$110
HP DESKJET/LASERJET	CALL

TERMS:
- 30-DAY MONEY BACK GUARANTEE W/10% RESTOCKING FEE.
- ALL PRICES ARE C.O.D. CASH.
- PRICE & CONFIGURATION SUBJECT TO CHANGE WITHOUT NOTICE.
- ALL RETURNS MUST BE AS-NEW AND SEND PREPAID, WITH RMA NUMBER.
- ONE YEAR WARRANTY ON PARTS.
- THREE YEARS FREE LABOR WARRANTY.
- WE ACCEPT VISA & MASTER CHARGE.
- ADD SALES TAX NO EXCEPTION.

MICRO MARKETPLACE

SUPER HOT SAVINGS

Dependable Computers with Affordable Price

486DX2-66MHz (4/250)

- 486DX2-66MHz Pentium Ready, Vesa Local Bus
- Intel CPU, 256Kb Cache • 4Mb Ram (Major Brand)
- 250Mb Hard Drive • Vesa I/O & IDE Card (32Bit)
- 1.2Mb, 1.44Mb FDDs • Mini Tower Case W/ Display
- 101 Enhanced Keyboard
- 1Mb Vesa SVGA Card (32Bit)
- SVGA 0.28 NI Monitor
- Hi-Res. Mouse W/ Pad

$1,309

486DX-33MHz (4/210)

- 486DX-33MHz Pentium Ready, Vesa Local Bus
- Intel CPU, 256Kb Cache • 4Mb Ram (Major Brand)
- 210Mb Hard Drive • Super IO & IDE Controller
- 1.2Mb, 1.44Mb FDDs • Mini Tower Case W/ Display
- 101 Enhanced Keyboard
- SVGA Monitor W/ Card
- Hi-Res. Mouse W/ Pad

$1,055

MULTI-MEDIA SPECIALS

Discovery CD 16 **$379**

Edutainment CD 16 **$475**

Creative Labs

Sound Blaster Pro Deluxe **$95**

Sound Blaster 16-MCD **$175**

Sound Blaster 16-ASP (MCD) **$189**

NOTEBOOK SPECIALS

HYUNDAI 486SLC-33MHz **$1,395**

4Mb Ram W/ 120Mb H.D.D
Built-In Track-Ball
PCMCIA Slot II
Carrying Case
Dos & Windows
18Months Warranty

INEX 486SLC-50MHz **$1,695**

4Mb Ram W/ 120Mb H.D.D
VGA-LCD Display
Carrying Case
Dos & Windows
12Months Warranty
Internal 96/24 Fax Modem

486DX2-66Mhz (Local Bus · 256K Cache)	486DX-50Mhz (Local Bus · 256K Cache)	486DX2-50Mhz (Local Bus - 256K Cache)	486DX-33Mhz (Local Bus · 256K Cache)	486DX-40Mhz (Local Bus - 256K Cache)	486DLC-40Mhz (128K Cache w/ Math-Co)
$609	$609	$499	$469	$459	$339

IBM486-66Mhz (Local Bus - 64K Cache)	486SX-33Mhz (64K Cache)	386DX-40Mhz (64K Cache)	386SX-40Mhz
$444	$315	$225	$199

Systems Include:
- Mini Tower Case W/ 200W Power Supply • 1.44MB Floppy Drive
- 1MB Ram • Super IDE Controller (1:1), 2S/1P/1G
- Realtime Clock & Calendar • 101 Enhanced Keyboard
- 1 YEAR Parts & Labor Warranty • 72 Hour Burn-In Test

ACCESSORIES

1.2MB FDD	$43
1.44MB FDD	$38
MOUSE	$8
TRACKBALL	$20
96/24 Fax Modem (Int)	$39
14.4/14.4 Fax Modem (Int)	$120
250MB Tape Backup	$155
NE2000 Comp. Card	$39
16Bit Stereo Sound Card	$95
Sony 33A-01 Dual Speed CD-Rom Drive (320ms)	$169

MONITORS

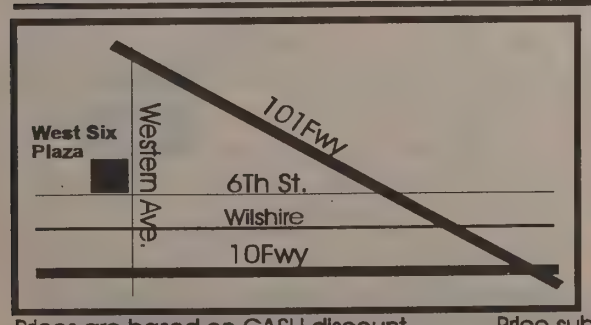
SVGA 14" (.39)	$195
SVGA 14" (.28)	$215
SVGA 14" (.28) NI	$239
SVGA 15" (.28) NI, FLAT	$349

HARD DISKS

170MB IDE DRIVE	$185
210MB IDE DRIVE	$195
245MB IDE DRIVE	$215
340MB IDE DRIVE	$269
420MB IDE DRIVE	$325
520MB IDE DRIVE	$429

PRINTERS

HP 520 B/W (Inkjet)	$295
HP 560C Color (Inkjet)	$555
HP LaserJet 4L	$649
HP LaserJet 4P	$880
HP LaserJet IV	$1319
Epson LQ-570+	$239
Epson Stylus 800 (Inkjet)	$339
Okidata OL410E Laser	$659
Mustek 24Bit Colors Full Page Scanner	$699



UPTOWN COMPUTER, INC.

Mon-Fri 9AM-7PM
SAT 10AM-6PM

559 S.WESTERN AVE. STE K L.A., CA 90020

TEL 213)389-0000
FAX 213)389-9545

1-800-201-3317

Prices are based on CASH discount . Price subject to change without notice. Uptown Computer is not responsible for any typographical errors.

MICRO MARKETPLACE

CP Computer Plaza

COMPUTER PLAZA

IMPOSSIBLE PRICE !

Pentium Power & PCI Local Bus
CP PCI PENTIUM

Intel PENTIUM 60MHZ
Intel ChipSet 3 PCI Local Bus, 4 ISA
True 64-bit Board & 256K Cache
8M RAM Installed
420MB IDE Hard Disk Drive
TEAC 1.44MB Floppy Disk Drive
Genoa W32P PCI Accelerator w/2M
I/O & IDE Controller on Board
Digital Medium Tower Case & Power
SVGA 14" 0.28mm NI Monitor
101 Enhanced Keyboard
Hi Resolution Mouse & Mouse Pad

Reg. $2499 Cash $2439

Upgrade Options: Add Below Price	
SVGA 15" .28 NI Digital	$145
SVGA 17" .26 NI Digital	$469
586 CPU Cooling Fan	$24
Diamond Viper PCI 2M	$289
Teac 1.2 MB FDD	$49
540MB Hard Disk Drive	$149
Pentium 66Mhz Upgrade	$229

Best Quality!

Professional - VESA Local Bus
CP VESA 486 DX2/66

486DX2/66 CPU
3 VESA Local Bus, Pentium Ready
256K Cache Memory
4M RAM Installed
210MB Hard Disk Drive
TEAC 1.44MB Floppy Disk Drive
VLB 32 Bit Video Accelerator w/1M
32 Bit FDD/HDD IDE Controller
Digital Mini Tower Case W Power
SVGA 14" 0.28mm Monitor
101 Enhanced Keyboard
Hi Resolution Mouse & Mouse Pad

Reg. $1319 Cash $1269

Upgrade Options: Add Below Price	
SVGA 15" .28 NI Digital	$175
SVGA 17" .26 NI Digital	$499
CPU Cooling Fan	$14
Orchid Fahrenheit VLB	$89
250MB Hard Disk Drive	$29
420MB Hard Disk Drive	$119
540MB Hard Disk Drive	$250

Best Service!

Practical - VESA Local Bus
CP VESA 486 DX/33

486DX/33 CPU
3 VESA Local Bus, Pentium Ready
256K Cache Memory
4M RAM Installed
210MB Hard Disk Drive
TEAC 1.44MB Floppy Disk Drive
SVGA Graphic Card w/1M
FDD/HDD IDE Controller
Digital Mini Tower Case W Power
SVGA 14" 0.28mm Monitor
101 Enhanced Keyboard
Hi Resolution Mouse & Mouse Pad

Reg. $1169 Cash $1129

Upgrade Options: Add Below Price	
486 DX/50MHZ Upgrade	$145
SVGA 14" 0.28mm NI	$29
SVGA 15" .28 NI Digital	$175
VLB Video Accelerator	$29
VLB FDD/HDD IDE Cntr	$19
250MB Hard Disk Drive	$29
420MB Hard Disk Drive	$119

Lowest Price!

Family VESA Multimedia Special !
486 VESA Multimedia

486 SX/25 Upgradable to DX2/66
4M RAM, 3 VESA Local Bus
210MB Hard Disk Drive
1.44MB Floppy Disk Drive
VLB 32 Bit Video Accelerator w/1M
32 Bit FDD/HDD IDE Controller
Digital Mini Tower Case W Power
Panasonic Double Speed CD ROM
Sound Blaster 16 bit Card, Speaker
SVGA 14" 0.28mm Monitor
101 Enhanced Keyboard
Hi Resolution Mouse & Mouse Pad

Reg. $1319 Cash $1279

Upgrade Options: Add Below Price	
SVGA 14" 0.28mm NI	$29
SVGA 15" .28 NI Digital	$175
MicroPhone	$12
Best CDs Bundle Pkg.	$69
250MB Hard Disk Drive	$29
420MB Hard Disk Drive	$119

Economical - VESA Local Bus
CP VESA 486 SX/25

486SX/25 CPU
3 VESA Local Bus,32 bit
Upgradable to 486DX2/66Mhz
4M RAM Installed
210MB Hard Disk Drive
TEAC 1.44MB Floppy Disk Drive
SVGA Graphic Card w/256K
FDD/HDD IDE Controller
Digital Mini Tower Case W Power
SVGA 14" 0.28mm Monitor
101 Enhanced Keyboard
Hi Resolution Mouse & Mouse Pad

Reg. $935 Cash $899

Upgrade Options: Add Below Price	
SVGA 14" 0.28mm NI	$29
SVGA Card w/1M	$40
VLB Video Accelerator	$70
VLB FDD/HDD IDE Cntr	$20
250MB Hard Disk Drive	$29
420MB Hard Disk Drive	$119

Affordable but Powerful
CP 386 DX/40 $699

AMD 386DX/40, 128K Cache
1m RAM, 210MB HDD, 1.44FDD
VGA Card w/256K, IO & IDE Control
MiniTower, 101 Keyboard
SVGA 14" Monitor 0.39mm

Accessories	
Glass Screen Filter	$24
Surge Protector Pad	$22
14.4 Fax Modem	$129
96/24 Fax Modem	$49

CP Multimedia $299

Sound Blaster 16bit, Speakers
Panasonic Double Speed CD

CD Quality Stereo, 20-Voice, 4 Operator FM, MPU-401
680MB, 64KB Ram buffer, 300KB/sec, 320ms, MPC II

Best CDs Bundle Pkg. **$69**

MPC Encyclopedia, Animals, Mavis Beacon
World & USA Atlas, Chessmaster 3000

For Approved Credit Only

Financing Available in 20 Min.

90 days Same As Cash !

VISA MasterCard

Lantastic Network
Accounting for Windows

One Year Parts & Labor Warranty

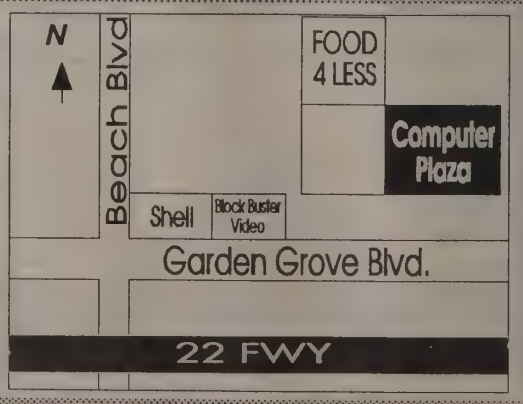
Computer Plaza

12860 Beach Blvd. #J
Stanton CA 90680

Mon-Fri:9am-7pm / Sat:10am-6pm

714-894-5063

Fax 714-894-0762



continued from page 64

imposed on top of the tax you're already paying. The PHC tax rate was recently increased to a bone breaking 39.6%

The penalty is imposed on undistributed earnings received when under contract to furnish personal services if the contract designates a 25% shareholder to perform the services.

Incorporated programmers easily fall prey by specifying in a contract that they, personally, will do the programming. This could spring two tax traps at once. First, as a personal service corporation, you'll step into the highest corporate tax rates in effect that year. Then you'll be slammed by the 39.6% penalty tax on top of that. Instead, specify that "the corporation" will provide the technology or service.

In one case, a taxpayer had a letter stating that "you" agree to do the designated work. The IRS tried to impose the penalty tax. The matter ended up in Tax Court, because it wasn't clear whether the "you" referred to the corporation, or the corporation's owner. In real life, of course, it may be the same set of fingers pushing the keyboard; but in tax land, semantics matter.

The 39.6% penalty tax may also be imposed on "passive" software royalties, even if the software that you develop is sold by some separate retailer. One test to avoid the penalty is that the software-related expenses (not counting your salary) must be at least 25% of the royalties.

BEWARE OF S CORPORATIONS

If all shareholders of a corporation consent to making what's known as a Subchapter S election, the corporation may elect to be taxed similarly to a partnership. If you own less than a controlling interest in a corporation, or are offered shares of an S corporation in payment for your technology or other services, consider carefully before you consent.

When an S election is made, the shareholders, rather than the corporation, are taxed on the corporation's income. When shareholders are close members of one family, problems are usually minimized. But if you own 49% of the outstanding shares, and your former best friend owns the other 51%, you'll wind up paying taxes on income earned by a corporation that you don't control, and the corporation might not even pay you enough of that income to cover the taxes.

DISQUALIFIED USE OF A HOME OFFICE

Let's look at one industrious techie who works hard, but not smart, out of his home. Maynard Slydrhul uses his home-office computer for everything: drafting proposals, contract programming, software development, and even in his fill-in work as a temporary employee.

Computer equipment is subject to special "listed property" rules restricting its deductibility. These rules don't apply if the computer is used exclusively at a regular business establishment and owned or leased by the person operating that establishment.

There's no problem with Slydrhul using the computer for his own business. But his use of it as an employee, even a "temp," will likely cause the computer to become listed property. Furthermore, even limited use of the office in the home by an employee may disqualify the home office deduction altogether, due to additional standards that apply to employees.

OVERLOOKING TAXES AND OTHER OVERHEAD WHEN PRICING SERVICES

There are generally three ways for programmers to be compensated for their services: wages, for employees; payment for services, for independent contractors; or sale of licensing rights, for developers.

If you're an independent contractor, don't underprice yourself. Your compensation must cover not only additional self-employment taxes and benefits, but a mess of other business costs and risks that employees don't carry.

Many software contractors charge just a bit under twice as much as they would make as an employee, and their smart corporate clients pay because a) they understand about the overhead, and b) it's still a bargain for them compared to taking on a regular employee.

Employees working through job shops or similar agencies should generally bargain aggressively. Assignments lasting less than a year usually don't offer the benefits available to comparably situated regular employees, nor does the job shop offer much in the way of job security. These factors should be weighed into your compensation package; stick to your guns.

MAKE APPROPRIATE ELECTIONS FOR RESEARCH EXPENDITURES

If you're a software developer, there's a good chance that you can currently deduct development costs, rather than capitalizing the costs and claiming depreciation only after you bring the product to market. This treatment is an elective method of accounting. If you don't make the election in a timely manner, the deductibility of these costs is restricted. If you've missed the election, you'll need to seek the consent of the IRS to adopt this method in future years.

GET SUFFICIENT PROFESSIONAL ADVICE

For developers or technical specialists, finding the right tax advisor is important. Structuring license and technology development contracts can involve issues spanning many facets of tax law, in addition to various laws and regulations affecting the tax treatment of patents, software, and research expenditures.

You'll probably want a certified public accountant or an attorney, either of which should be a tax specialist—sometimes a client will bring in a contract drafted by a general business lawyer to be "checked over" by their tax accountant, only to find that much of the document would need to be redrafted to take into consideration the tax ramifications.

To protect the public, the State Board of Accountancy and the State Bar impose extensive regulations and restrictions on who may practice and how that practice must be conducted. While an unlicensed tax preparer or an EA (enrolled agent: a non-accountant admitted to practice before the IRS) may have some advanced tax training and experience, they often don't. Moreover, the State doesn't oversee these operations to enforce competency or professional ethics.

Even if a tax preparer is a CPA, if the firm employing him or her is not a CPA firm, registered with the Board, you won't be protected. Insist on an engagement letter and verify with the Board of Accountancy (phone 916/574-2155) that the firm is in good standing. Note that the Yellow Pages permit anyone to list themselves under "Certified Public Accountant," even if the business or individual cannot legally claim to be one.

Noncertified preparers may be appropriate for those individuals whose needs are quite simple and won't justify the relatively heftier fees of a tax attorney or CPA.

Unlike attorneys, CPAs are prohibited from advertising areas of specialization. You can ascertain areas of expertise by inquiring about the practitioner's activities in professional organizations or the topics of his or her published works, or asking a few technology tax-related "test" questions. For attorneys, check their listing in Martindale-Hubbell, a standard reference available at your library.

USE A TAX ORGANIZER

Everyone should use an income tax organizer. Not only is it a useful organizational tool, it also acts as a checklist for commonly encountered items of income and deduction.

Some of my clients use do-it-yourself tax software, such as MacInTax, to organize their individual tax information. This is fine as long as you understand that these packages don't accommodate all of the forms, elections, and options that a more complex tax situation requires.

If you need a 1993 individual, partnership, or corporation tax organizer, a complimentary one can be mailed to you from my office at (510)893-5753. ■

The authors and publisher assume no responsibility for use or content of this article. Your professional tax or legal advisor should be consulted on such matters as they apply to your situation.

Learning To Read

Brøderbund's Living Books Can Read Themselves To You Or Turn Into An Interactive Learning Experience For Kids Of All Ages

BY PETER JOHN HARRISON

RESOURCES:

Brøderbund Software, Inc.
1-800-521-6263

"Daddy, I want to play with the book."

I hear a lot of that from my 4-1/2-year-old son lately. William likes to sit down with a book and enjoy himself. Not just any book though, he wants to play with one of Brøderbund's Living Books.

A Living Book is nothing like those dry picture books you remember from grade school. It's an interactive learning experience that ties the spoken and written word together with animation that draws nonreaders and readers alike into the story. Take Aesop's tale of "The Tortoise and the Hare," a story I learned when I was William's age.

As the narrator for Brøderbund's The Tortoise and the Hare explains that "the Tortoise was a friendly fellow who moved at his own slow pace," the words on the page light up, helping my budding young reader learn what letters go with what words. Once the sentence has been read, Aesop's famous old Tortoise comes ambling out of his home with a yawn and a stretch, says hello, and sits down on a bench. The whole story unfolds like that, as if it was a movie with subtitles in the same language and you get to pick the language, English or Spanish, even Japanese with some titles.

A Living Book isn't just another way to read to your kid, though. There are two ways to use a Living Book. You can ask the book to read itself by selecting the "READ TO ME" button with your mouse, or you can turn it into an interactive learning experience, by selecting the option "LET ME PLAY."

When you select LET ME PLAY, the pages of the book are read one at a time, pausing to let the reader "play" with the characters, words, and "inanimate" objects on the page. For example, following the reading of page one of The Tortoise and the Hare, where the two main characters are introduced, the reader can click on the Tortoise, who looks out at the reader, smiles, and says, "Don't you just love mornings?," only to have the Hare stick his head out his front door to reply, "No, they're too slow!"

Each page has things do something when the reader points and clicks on them. The mailbox yawns. The Rabbit comes out and reads the newspaper when you click on it. The birds jump and chirp. There's also an icon on each page for when you want to reread the page, or you can click on individual words, and just that word is read.

Brøderbund's Living Books redefine the term "Intuitive Interface." Once the book has been started, one of the characters comes up on the screen to explain which button to press to have the book read to you, and which button to press if you want to play in the book. You don't have to know how to read to learn how to read, though it's a little confusing to beginning readers when they push one of the buttons for Spanish or Japanese.

Currently Brøderbund has four titles in its Living Books series. For kids of all ages, reading or not, there's Aesop's The Tortoise and the Hare, and Mercer Mayer's Just Grandma and Me, a story about "Little Critter's" trip to the beach with Grandma. For older kids, who are ready for longer stories and more vocabulary, there's Marc Brown's Arthur's Teacher Trouble, a story about going to grade school and preparing for a spelling bee. Brøderbund's fourth title, The New Kid on the Block, is a collection of wonderful little poems by Jack Prelutsky, and is intended for older children who are ready to read on their own, though it's fun for children of all ages.

Brøderbund's Living Books are available for both Macintosh and Windows systems. For the Mac, you need System 6.0.7 or higher, a 256-color display, 4MB of RAM, and a CD-ROM drive; for the PC you need Windows 3.x, a 256-color display, 4MB of RAM, a CD-ROM drive, and a Sound Blaster or Sound Blaster-compatible card. Brøderbund also says a 386SX Windows system should have enough power to run their software, but I found that on a 386SX/25 system, the animation lagged behind the audio for many of the Living Book sequences. I suggest using at least a 386DX/33 to keep the animation and audio in sync.

Brøderbund's Living Books will never replace my sitting down with William and reading him a bedtime story, but they are a good way to get him interested in reading. Living Books make reading fun for him, and that's what I want him to learn, that books and reading can be fun. ■

A Living Book is nothing like those dry picture books you remember from grade school.

Copyright © 1994 by Peter Harrison. All rights reserved. Peter Harrison, a San Mateo-based data communications and connectivity specialist, can be reached via USENET (peterh@well.sf.ca.us) or CompuServe (74017,1716).

PC CLUB

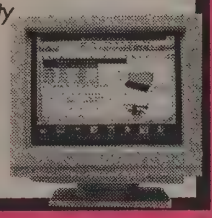
LOWEST PRICES!

WHOLESALE – OPEN TO THE PUBLIC

SUPER VGA .39

- 1024 x 768 Monitor
- 14" Color
- One Year Warranty

$179



ENPOWER! SYSTEM OF THE MONTH

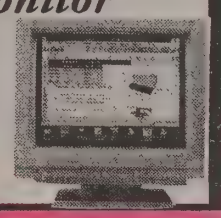
486DX-33..... $899

System Includes:
- 3 VESA Local Bus Slots
- 256K Cache
- 4MB RAM
- Mini Tower w/200W
- 1.2 & 1.44 MB Floppy Drive
- Local Bus SVGA with 16M Color
- Local Bus IDE Controller
- 2S/1P/1G
- 101 Enhanced Keyboard
- 250 Megabytes IDE Harddrive (Monitor not included)

1024 x 768 .28 14" Non-Interlaced SVGA Monitor

- Non-Interlaced
- One Year Warranty

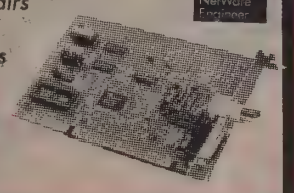
$219



NETWORK CARD 2-In-1

- Twisted Pairs
- BNC
- Jumperless

$44



CPU BLOWOUT

★ CPU ★ MOTHERBOARD & ★ MEMORY AT AN UNBEATABLE PRICE!

Intel

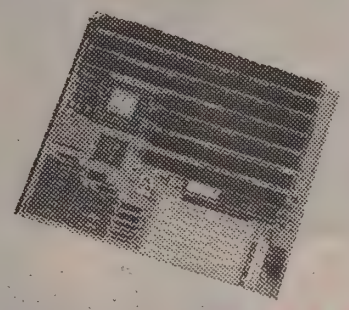
486SX-25	$72
486SX-33	92
486DX-33	242
486DX2-50	265
486DX2-66	365
486DX2-66 Running at 80MHz	399

Cyrix

486DX-33	$190
486DX-50	322

AMD 486

486DX2-40	$215
486DX2-66	$329



486 VLB Motherboard, 256K Cache with 4MB RAM..... $219

ENPOWER! 2-in-1

- VLB IDE
- VLB SVGA 1MB

$89

Windows Accelerator 1280 x 1024

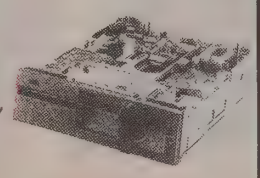
- 1MB
- 16.7 Million Colors

$65

TEAC. Floppy Drive

1.44MB, 3.5" $35

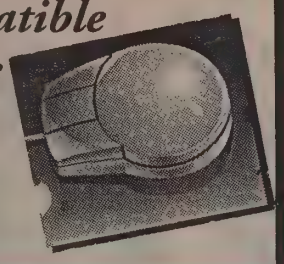
1.2MB, 5.25" $43



Microsoft Compatible Mouse

- 3 Button
- Serial

$8



Double Speed CD ROMS

- Sony 33A
- Panasonic 562
- 320ms

$155

Toshiba 3401

$299

486DX2-66 VLB SYSTEM

System Includes:
- 3 VESA Local Bus Slots
- 256K Cache
- 4MB RAM
- Mini Tower w/200W
- 1.2 & 1.44MB Floppy Drive
- Local Bus SVGA w/16M Colors
- Local Bus IDE Controller
- 2S/1P/1G
- 101 Enhanced Keyboard
- 420MB Hard Drive
- Monitor Not Included

$1149

CD Titles on Special

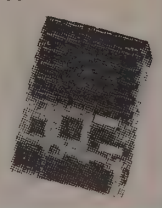
Compton's Encyclopedia Windows Version..... $29
Myst..... $49
Scissors & Stones..... $39
10 CD Titles Pak..... $39.99

And 500 Other Titles Available

ENPOWER! 486SLC-33 Motherboard

- Includes CPU
- AMI BIOS
- 6 Slots
- 107.8 Landmark Performance

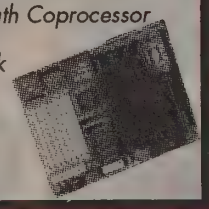
$89



ENPOWER! 486DLC-40 Motherboard

- Includes CPU/Math Coprocessor
- 128K Cache
- 129.77 Landmark Performance

$169



IBM 486SLC2-66 Motherboard

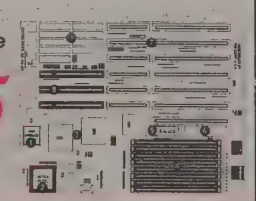
- Includes CPU & Math Co-processor
- ISA

$219

IBM 486SLC2-66 VLB Motherboard

- Includes CPU & Math Co-processor
- 3 VLB Slots
- 128K Cache

$275



PC CLUB

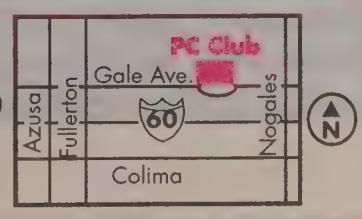
18537 E. Gale Ave.,#B • City of Industry, CA 91748

Fax: (818) 913-0123

(818) 913-CLUB (2582)

VISA MasterCard

Hours:
Mon-Fri 10:00-8:00
Saturday 10:00-7:00
Sunday 11:00-6:00
Financing Available



Reseller Program Available. Ask in store for details.

Prices subject to change without notice. Product availability subject to change.

By: Mary Eisenhart • Photos: Susana Millman

Andrew Preston, Heidi Roizen, Diane Kreyenhagen, John Tompane, and Royal Farros of T/Maker with a few of their products.

How A Little Word Processor Company Found Happiness In The Content Business

Reinventing Maker

When we last interviewed T/Maker's Heidi Roizen and Royal Farros in 1988, the company had just hired its fourteenth employee. Its word processor, WriteNow, the result of a then-serendipitous publishing arrangement with Steve Jobs, was a scrappy contender in the Mac market; the ClickArt clip art packages, with images ranging from Business Art to Christian Images, were a nice little side business; and the thriving company was just moving to larger headquarters in Mountain View.

So determined were Roizen and Farros, who then owned 99% of the company, to keep control of its evolution that they'd previously sold two successful products—PFS: First Publisher, aka ClickArt Personal Publisher, to Software Publishing, and ClickOn Worksheet to Borland for inclusion in Sidekick—when their popularity would have forced T/Maker to grow at uncomfortably rapid rates. Said Roizen at the time, "Our basic theory is that if you don't control your company, you don't control your destiny. We're always reevaluating this, but our current feeling is we'd like to grow without ever needing any outside investment. We have no debt, we have no venture capital, no outside investors, and no outside shareholders."

Things changed rapidly thereafter. The first VC money came from Hummer Winblad, to be followed by other investments. Meanwhile, WriteNow faced an ever-greater struggle against an ever-more-monolithic Microsoft, and the ClickArt business grew. Roizen and Farros looked at the changing world and concluded that, for small companies like theirs, competing in the application marketplace was an exercise in futility, and Content was the future.

Ultimately they sold WriteNow to WordStar, precipitating changes that both of them consider the company's darkest hour. Recalls Roizen, "I was six months pregnant, walking around raising venture capital. I remember the day I had to come in and lay off people, and here I was, this rolling thing coming in, and the baby's kicking, and I'm sitting there telling people they're losing their jobs, and I went home and thought, 'This is the worst day of my life. I hope what we're doing is right, because this sure hurt.'"

Things are much rosier these days. T/Maker's expanding product line now includes ClickArt products at price points for professionals and consumers, and its entry into multimedia is off to a promising start with the first in the ZoomBooks series for children, Four-Footed Friends. Other ZoomBooks are in the works, with Stradiwackius, the epitome of silly musical experimentation for kids, due in late April. Also in the works, in varying degrees of nondisclosure, are joint ventures with companies outside the computer industry, from business printers to television networks. (T/Maker, 415/962-0195)

✶

When last we talked, you were a 14-person company owned almost entirely by you two, and you were saying "No growth, we don't want to be a big company. No VC for us, no sir..."

Royal Farros: [*laughs*] And it was three months later...

So you've redefined the concept of the company pretty thoroughly since then...

Heidi Roizen: We're looking at how do you make a small software company go forward in this era. When you're not Microsoft, what do you do? Which we hope we have an answer for.

First of all, Royal and I turned 30—unfortunately me first [*laughs*]—and I think you reflect on what are you doing at the company, what are you trying to accomplish, what are you trying to do in your personal life.

We found that our no-growth strategy had some problems. First of all, it meant it was hard to attract key individuals for the future, because they want to see some growth, some payoff, and some opportunity to build something.

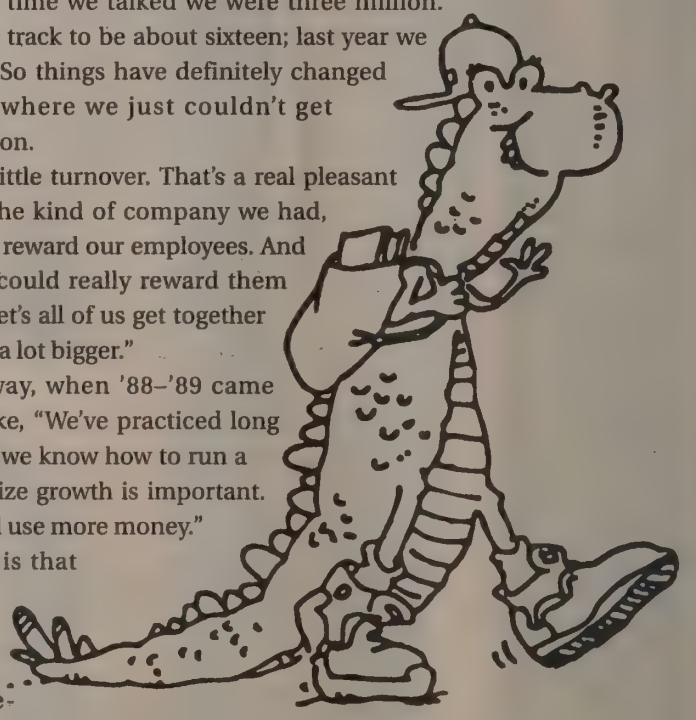
Second of all, we wanted to see some personal payoff for this someday...

One day you realize that you don't want to work like a dog for the rest of your life?

HR: Or even if you *do* want to work like a dog for the rest of your life, at some point it's nice to have some personal freedom—when you're working this hard, some people build equity, others don't. We wanted to be ones who did.

Beyond that, I think there's an issue of the company being able to do things. If the company's not growing, it doesn't attract products to it. It doesn't attract new ideas. It doesn't bring forth opportunities for the kind of financing you need to buy products from the outside and bring them in. We found we were constantly living a hand-to-mouth existence and we could never get above that $3 million level.

I think the last time we talked we were three million. This year we're on track to be about sixteen; last year we were about nine. So things have definitely changed since that level where we just couldn't get beyond three million.



RF: We had very little turnover. That's a real pleasant consequence of the kind of company we had, and we wanted to reward our employees. And the only way we could really reward them was to say, "Hey, let's all of us get together and make this pie a lot bigger."

HR: In a funny way, when '88–'89 came around, we felt like, "We've practiced long enough. We think we know how to run a company. We realize growth is important. We know we could use more money."

Another thing is that we almost got in a rut managerially, where we were running something, but we just did it the same way because we always did it that way. At a certain point you start thinking, "Could I be doing more? Could I be challenged?" Because it kind of gets boring, to do the same thing.

So in a way bringing on real venture and having millions of someone else's dollars and having a million-dollar bank loan and all sorts of crazy things to boost the company up is exciting.

We have three venture capitalists—Hummer Winblad; Bryan and Edwards,

SIMI VALLEY SALE

April 20 - May 7 Only!

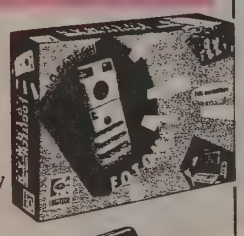
LOGITECH Factory Outlet

Save on returns, factory refurbished, cosmetically blemished, or last year's models!
Call Now! Great Prices! Stock is Limited!

Get Logitech quality mice, scanners, camera, and sound products at the absolutely lowest prices. All merchandise is fully functional, has been factory inspected, and comes with warranty. Products are new, returns, or have minor cosmetic blemishes. So hurry now, at these great prices they won't last.

CAMERAS

FotoMan Digital Camera



- PC & Mac
- 72dpi
- 256 Gray scale
- New with full warranty
- Last year's model

reg. $799 **$280.00**

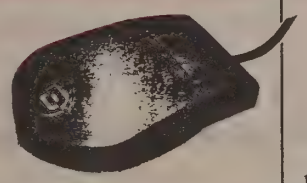
FotoMan Plus

- PC & Mac
- 256 Gray Scale
- Hi-Resolution
- Return or Factory Blemish

reg. $799 **$450.00**

MICE

Dexxa Mouse



- Mfg by Logitech
- Great entry level
- DOS & Windows

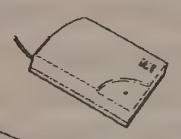
reg. $29.95 **$9.95**

MouseMan

- 400dpi resolution
- Shaped to fit the hand
- Available for right and left hand
- Serial interface, PS2 Adaptable
- Last year's model

reg. $119 **$29.95**

MouseMan Cordless Mouse



- Hi-Resolution
- 3-Button
- radio waves see through objects on desk
- Last year's model
- The ultimate mouse

reg. $169 **$49.95**

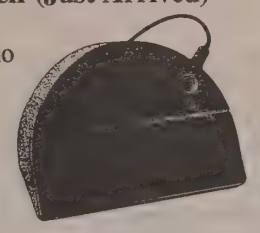
SCANNERS

ScanMan Model 32

- 32 Gray Scale
- 100-400dpi
- DOS & Windows Compatible

reg $199 **$59.95**
Mac Version reg. $399 **$144.95**

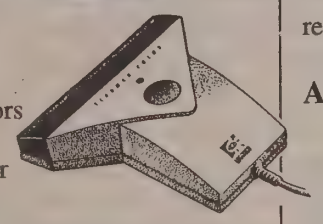
ScanMan Easy Touch (Just Arrived)



- For Windows
- Parallel interface, no board required
- 256 Gray Scale
- 100-400dpi
- Great for portables

reg. $399 **$165.95**

ScanMan Color

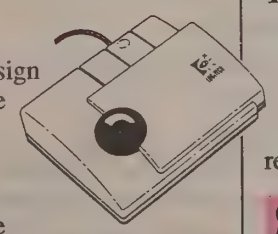


- For Windows
- 24-bit 16.8M Colors
- 100-400dpi
- Perfect for all your scanning needs

reg. $699 **$299.95**

TRACKBALLS

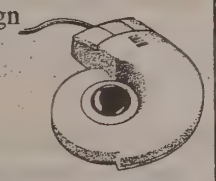
TrackMan



- Last year's version
- 3-Button
- Hi-Res thumb ball design
- PS2 or serial available

reg. $139 **$24.95**

Trackman II

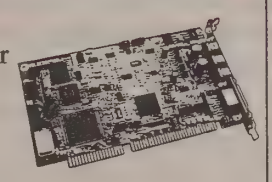


- New ergonomic shape
- Hi-Res. thumb ball design
- 3 buttons
- Serial interface or PS2 adaptable

reg. $119 **$39.95**

SOUND BOARDS

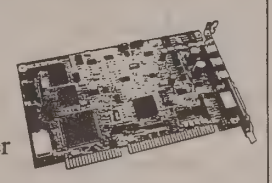
SoundMan Games



- True 8-bit stereo
- 100% Sound Blaster ad-lib compatible
- Compare to Sound Blaster Pro
- DOS or Windows
- New with warranty

reg. $159 **$49.95**

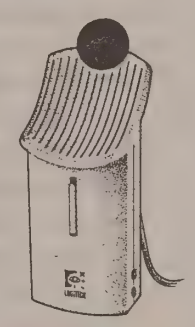
SoundMan 16



- 100% Sound Blaster ad-lib compatible
- 16-bit CD quality sound
- Perfect for Multimedia

reg. $199 **$84.95**

AudioMan

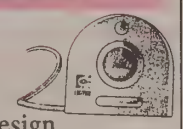


- Add sound to business applications
- Built-in speaker and microphone

reg. $179 **$49.95**

TRACKBALLS

TrackMan Portable



- Ideal for Portables
- Clamps to side of keyboard
- Thumb operated 3-button design
- Serial interface or PS2 adaptable

reg.$169 **$39.95**

SOFTWARE/MANUALS

Software and manuals available for all products with hardware purchase.

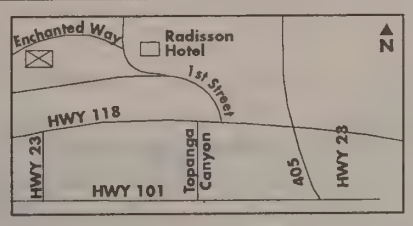
- MouseWare Utilities 6.3 ..... **$14.95**
- FotoTouch Color Image Editing **$39.95**
- Omnipage Direct for Logitech..... **$39.95**
- SoundMan v.1.1..... **$12.95**

LOGITECH

LOGITECH Factory Outlet
920 Enchanted Way, Simi Valley, CA 93065
Hours M-F 10-7, Sat 10-4
(800) 936-0088
(805) 520-8282

VISA
MasterCard

Prices Subject to change. Not responsible for typo's and graphical errors. Software and Manuals sold separately. All sales final. 60 Day Warranty Included • Extended service contracts available. When visiting No. Cal. stop by and visit our factory outlet. Call for directions.



which is a local old-line firm; and Draper Associates, which is a wild and woolly, relatively new venture firm, who got started about the same time as Hummer Winblad. They do mostly small seeds—they did Digidesign, that was one of their bigger ones. They did *Parenting magazine* and Upside, all kinds of things. They're kind of a crazy group.

So to make a long story short, the main reason we took venture capital in '89 was to make this company happen. But the reason we *had* to do it was the deal with WriteNow.

At the time, we had to buy out the source code from NeXT, and we felt it was imperative that we controlled the source code in order to be able to do upgrades. That cost us a lot of money, in the millions of dollars. We didn't happen to have a few million handy, so we had to go out and get it somewhere.

That was the driving force behind making the decision to get venture, but it was also the last straw—we had already sort of been ready.

The *Reader's Digest* version to get up to today: We banked on WriteNow on the entry-level, power-, low-cost Mac word processing market. The market took a while to get there; when it did, the integrated applications really found a place; and not being cross-platform killed our opportunities in corporate America, which was really where people were making the purchase decisions. The net result was, WriteNow was an opportunity, it had its cult following, but it wasn't a growth area, it just continued to stay where it was.

RF: We're really proud of what we did with WriteNow. I think we're the only word processor other than Word that's actually profitable. We're really proud of its history and its customers.

HR: About two years ago we really saw the writing on the wall with WriteNow. It consumes a lot of resources. It's Mac-only, which means it's kind of a cul-de-sac.

We didn't want to kill it, we wanted to see it continue. We did a deal that wasn't necessarily the most money, as opposed to being the best outcome for the product. What we needed to do was find a word processing company that didn't have a Mac version. So really, WordStar was a unique choice in terms of ensuring its longevity. We did a lot to make sure that the development team went with it, they all got jobs. They all continued to work here...

RF: One week they were on our payroll and the next week they were on WordStar's payroll, but their environment stayed the same.

HR: They worked here for over a year, through the 4.0 release.

RF: Meanwhile, for years we had this thing called ClickArt, and it slowly, slowly, slowly started to gain pretty impressive numbers. You couldn't run a company the size that we were back in '88, '89, '90 on ClickArt, but all of a sudden in '92, half our revenues came from WriteNow and half of them came from ClickArt. So now we were in the position of deciding if we were going to spin off one or the other.

HR: Number one, ClickArt was a bigger category than WriteNow. Number two, when we started looking at the company, we said, "Hey, quite frankly we're not making a lot of profit here, and what are we doing to move this business forward?"

RF: ClickArt was always the smaller product line, but it was growing at about 60% a year.

HR: Also it was less technically exciting. I think a lot of times in a company like this whose heart is in its development, it's not as interesting to do products that aren't development oriented. It's not as challenging.

It's kind of Rodney Dangerfieldish to be a ClickArt company.

But we looked at all this, and we looked at where the market was going, and we said, "Let's be real serious about this. We have a company, we have investors, we'd like to make something out of this."

In a way we're lucky because we hit the wall before other people, and now you see the SPCs and the Borlands and all these companies having problems because they're relying on their old main-line applications, and here we were, a small company that was already getting kicked around early, so we had the glorious opportunity to revise our strategy early in the game.

We looked at the market and said, "There's a lot of new users coming into the market. There's a lot of people who are using image content. Everyone who's a computer user can use it. The channels are changing, the price points are coming down, there's all sorts of things that are happening that are pretty much the reason why ClickArt is doubling every year without our even doing anything."

RF: Prior to '92, people said, "Oh, that's that little clip art stuff." From '92 forward, people started saying, because of multimedia and because of Windows, "Oh, that's not clip art, that's content!" And all of a sudden it took on this brand new buzzword appeal, and it wasn't just the Rodney Dangerfield stuff.

It wasn't clip art, it was Intellectual Property!

HR: Yeah, exactly.

We started figuring out this stuff, and also the way that somebody buys that stuff, that it is a consumable—they use the images, they want new images. Royal said, "I can only sell somebody one word processor, but I can sell them a lot of ClickArt."

I remember one time a couple of years ago you were speaking at one of Dick Shaffer's conferences, and you said you'd looked at the figures for FaxMania and the figures for WriteNow, and the FaxMania unit sales were something like an order of magnitude higher than the sales for WriteNow.

HR: Right. And now, especially, we look at ClickArt, and it's a very different model. The whole business model has changed, too—we're now selling products that cost a lot less, that are less technical, that you have to have a lot more variety. The whole marketing issues are all so different.

So really the whole company had to reinvent itself around this new concept: that we're in the business of selling consumer software that's at this sub-$50 price point—the truth is really half our titles are at a sub-$30 price point.

RF: We learned something, though, from the previous period. To be profitable with WriteNow, even though we thought it was a great product, we had to merchandise the heck out of it. We really had to work the channels.

FUTURE COMPUTING SOLUTIONS INCORPORATED

HEWLETT PACKARD Authorized Dealer · COMPAQ Authorized Dealer · TOSHIBA · Authorized Reseller · IBM Authorized Dealer · SHARP Authorized Dealer · NEC Authorized Dealer · AST

T4000CT: The Advanced Multimedia Notebook

- Blazing Fast 75MHz Intel DX4
- Multimedia Ready: 16-bit WAV Audio, built-in Microphone and Speaker, Audio Jacks, and Pre-installed Windows Sound System.
- 500MB Hard Disk Drive
- 8MB Of Standard RAM (Exp. to 32MB)

75MHz **$CALL**

T1950CS

40MHz, i486DX2,4M, DOS, WIN, MOUSE, Color, 1 PCMCIA Slots.

120 MB $2398
200 MB $2598

Apple Power Macintosh 6100/60

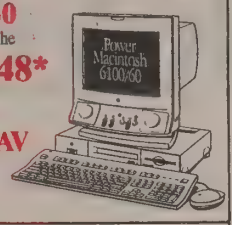
60MHz Power PC 601 Microprocessor/Floating Point, 32K Cache

8/160 **$1698*** 8/250 -CD **$2148***
16/250 SoftWindows **$2368***

Apple Power Macintosh 6100/60AV

8/250-CD **$2368***

*Monitor & Keyboard Not Included



Installation · Administration · Service · Support · Training

Novell Authorized Reseller

- Novell Certified Engineer
- Complete hardware & Software System Integration
- Network Upgrade & Maintenance
- Cabling

COMPLETE NETWORK SOLUTIONS

The Ultimate Combination of Sight, Sound & Processing Power in a NoteBook Computer

T4700CT

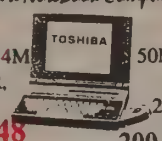
50MHz, i486DX2, 4M ACTIVE COLOR, 2 PCMCIA Slots

200 MB $4648
320 MB $4998

T4700CS

50MHz, i486DX2, 4M Color, 2 PCMCIA Slots

200 MB $3998
320 MB $4348



T1950CT

40MHz, i486DX2,4M, DOS WIN, MOUSE, PCMCIA, ACTIVE COLOR

120 MB $2898
200 MB $2988
320 MB $3288

T1950

40MHz, i486DX2,4M, DOS, WIN, MOUSE, PCMCIA, Monochrome

120 MB $1898
200 MB $2138

Power Macintosh 7100/66

60MHz Power PC 601 Microprocessor

8/250 **$2728**

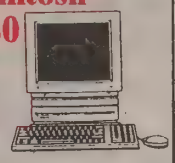
16/250 SoftWindows **$3178**

Power Macintosh 8100/80

80MHz Power PC 601 Microprocessor

8/250-CD **$4168***

*Monitor & Keyboard Not Included



T4400SX

25MHz,486SX, 2MB, DX UPGRADEABLE NOTEBOOK

80 MB $1198
120 MB $1298

Ultra-Portable Notebook T3400

PROTEGE™ 33MHz, i486SX, 4MB PCMCIA, 4.1 Lbs, MONOCHROME

120 MB $2248

T3400CT

PROTEGE™ NOTEBOOK, 33MHz, i486SX, 4MB PCMCIA, 4.4 Lbs, ACTIVE COLOR

120 MB $3488

T6600C

ADVANCED PROTABLE COMPUTER 66MHz, i486DX2, 8MB, ACTIVE COLOR

510MB **$6268**
510MB-CD **$6798**

QUADRA 605

25MHz 68L040 CPU
FAST BUILT IN MONITOR SUPPORT
POWER PC UPGRADABLE

4/80 **$878**
4/160 **$1168**

QUADRA 610

25MHz 68040 CPU
FAST 5.25 INCH BAYFOR CD!
POWER PC UPGRADABLE

8/160 **$1318**
8/230 **$1648**

QUADRA 650

33MHz 68040 CPU
3 NUBUS, BUILT-IN MONITOR SUPPORT
POWER PC UPGRADABLE

8/230 **$1928**
8/230-CD **$2238**

T1910/CS

33Mhz, i486SX, 4MB, DOS, Win, Mouse, PCMCIA, Mono/Color

120MB **$1548**
120MB/CS **$2148**
200MB/CS **$2348**

T6600C/CDV

The Fully Intergrated Mobile Multimedia PC. 66MHz. i486DX2, 8MB MS Sound System, MiDi Playback, WAV Audio, 2 Built-in Stereo Speakes MS Microphone, CD-ROM

510 MB $7848

T6400MM/C

Advanced MultiMedia Computer, 50MHz. i486DX2, 4M, *Active Color*, Mambo Card, Multimedia Software, Speakers, Samsonite Case

200MB **$4998**

T1900 Mono/Color

20MHz, 486SX, 4MB DOS, WIN, MOUSE, CLARIS WORKS, LOTUS ORGANISER, CASE

120MB **$1448***
120MB/C **$1948***

*Factory Refurbished

QUADRA 660 AV

33MHz 68040 CPU
55 MHz DIGITAL SIGNAL PROCESSOR
POWER PC UPGRADABLE

8/230 **$1688**
8/230-CD **$1938**

QUADRA 840 AV

40MHz 68040, FAST 66 MHz DIGITAL SIGNAL PROCESSOR
POWER PC UPGRADABLE

8/230 **$2838**
8/230-CD **$3088**
16/500-CD **$3888**

POWER BOOKS

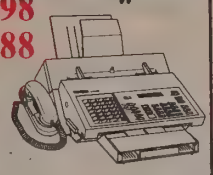
PB 180c 4/80 **$2368**
PB 180 4/80 **$2048**
PB 145B 4/80 **$1278**
PB 165 4/80 **$1588**

SALES ❖ SERVICE ❖ RENTALS ❖ LEASING — Absolutely Guaranteed Low Prices

The Plain-Paper HP FAX-950. HP Makes it Feature-Rich. We Make it Affordable.

HP FAX-950 $998
HP FAX-900 $788

- No more flimsy thermal faxes to re-copy
- HP quality & relaibility



HP DESKJET 520 INKJET PRINTER $298

HP DESKWRITER 520 INKJET PRINTER $298

600 x 300 dpi. up to 3-ppm output

FCS Presents The New Standard In Laser Printing From HP.

HP LaserJet 4 Printer $1348
HP LaserJet 4M Printer $1848

- 600 dpi print quality at a 300dpi price
- Fast 8-ppm printing for complex documents
- Full network capabilities (w/options)
- Easy to use

FCS Makes Great Performance Affordable With the HP Laserjet 4L Printer

HP LaserJet 4L Printer $638
HP LaserJet 4ML Printer $978

- 300 dpi text & graphics, w/1 Mb Memory
- Lowest priced HP LaserJet Printer ...EVER!

Now, See Why Color Printing Is Practical For Your Everyday Document.

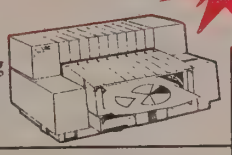
HP DeskJet 1200C $1398
HP DeskJet 1200C PS Printer $2098

- Laser Jet Compatible For Convenient Document Portablilty
- Easy Set-up w/built-in Support For Windows & PC application

Big Budget Looks. Small Budget Price.

HP DeskJet 500 HP Desk Writer $294

- Laser-quality printing at a dot matrix price for affordability



Price Breakthrough On The HP Deskjet 500C Printer!

HP DESKJET 560C INKJET PRINTER $568
HP DESKWRITER 560C INKJET PRINTER $568

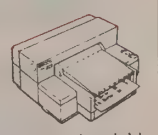
600 x 300 dpi. Black & Color Printer
35 Scaleable True Type fonts

FCS Presents Mac Users With The Black & White Printer With A Colorful Side.

HP DeskJet 550C $478
HP DeskWriter 550C

- 300-dpi, laser-quality black & white printing
- 35 scalable fonts
- Integrated spooling for faster print speed

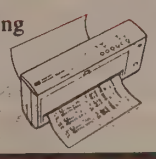
*Postscript option Available



FCS Presents The HP Deskjet Portable Printer For Peple On The Go.

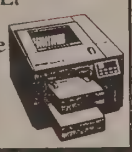
HP DeskJet 310C $298
HP DeskWriter 310

- 300-dpi, Laser-quality printing
- Up to 3 ppm; 100 pages per single charge
- Weight JUST 4.4 Lbs
- Color Option $38



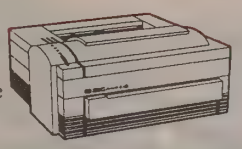
HP LaserJet 4Si Printer
HP LaserJet 4Si MX Printer

- True 600 x 600 dpi printing w/REt & microfine toner
- HP JetAdmin allows easy remote operation Novell Netware



HP LaserJet 4P Printer $948
HP LaserJet 4MP Printer $1298

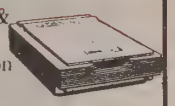
- 600-dpi text and graphics,
- 4 page per minute



FCS Introduces A New Revolution In Scanning.

HP ScanJet IIcx Scanner

- Ideal for both monochrome & color graphics & text
- 400dpi high quality resolution
- Enhanced OCR accuracy w/HP Accu Page technology



IBM/MAC $948/878

COMPAQ

LTE Lite 4/33

Color, 33MHz, 486SL, 4MB DOS, WIN, MOUSE, ACTIVE COLOR, 6.5" Lbs

120 MB $3798
200 MB $4448

CONCERTO 4/25

25 MHz, 486 SL 4 MB, 2 PCMIA SLOTS Keyboard & Pen Based

120 MB $2378
250 MB $2668

CONCERTO 4/33

33 MHz, 486 SL 4 MB, 2 PCMIA SLOTS Keyboard & Pen Based

250 MB $2948

PROLINEA MT 4/33S

33 MHz, 486 SX-Mini Tower, DOS, WIN, Mouse

270 MB $1398
340 MB $1498
340 MB-CD $1898

PROLINEA 4/33

30MHz, 486DX2, 2DR, DOS, Win, Mouse

240MB $1598

DESKPRO 5/60 M

60 MHz, PENTIUM, 16MB, Q VISION, DOS, WIN, Mouse Audio

240 MB $3898
510 MB $4198

DESKPRO 5/66 M

66 MHz, PENTIUM, 16MB, Q VISION, DOS, WIN, Mouse, Audio.

510 MB $5638

PROLINEA 4/33S

33MHz, 486DX2 Desktop, DOS, Win, Mouse

120MB $1398
240MB $1448

Compaq LTE Elite 4/75CX $CALL

8MB RAM, 2.5 to 4.0 hour Battery Life, 9.5" VGA Color Display

Compaq LTE Elite 4/50CX $CALL

8MB RAM, 2.5 to 4.5 hour Battery Life, 9.5" VGA Color Display

Compaq LTE Elite 4/40CX $CALL

4MB RAM, 2.5 to 5.0 hour Battery Life, 8.4" Color VGA Display

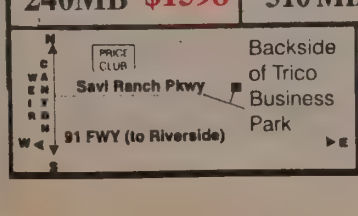
Compaq LTE Elite 4/40C $CALL

4MB RAM, 3.0 to 5.5 hour Battery Life, 9.5" Color VGA Display

SPECIAL OF THE MONTH BLOW-OUT PRICE$

SHARP	SHARP	SHARP PC
JX-9400 300dpi 6ppm Laser	JX-9460 PS 300dpi 6ppm postscript	8850 33MHz DX Active Color Notebook DOS, WIN
$498	$898	4/200 $2898

AST BRAVO BUNDLE	AST BRAVO	IBM PS/2
W/Color Monitor 4/33-120, DWM	4/66-213, DOS, WIN, MOUSE	9556DB6 486 SLC2, 100MB,50MHz 8M,DWM
$1598	$1998	$1698



OPENING SOON PHOENIX

OPENING SOON SAN DIEGO

Future Computing Solutions Inc.
22835 Savi Ranch Pkwy, Ste C, Yorba Linda, CA 92687
Tel : 714/282-9100 • Fax : 714/282-9400

Mon.-Fri. 8:30-5

Advertised prices reflect 3% cash discount. Corporate & Aerospace purchase orders accepted. Prices & availability are subject to change without notice. Additional discount to qualified faculty & research staff. FCS is not responsible for any typographical errors. Apple, the Apple logo, AppleTalk, LocalTalk and Macintosh are registered trademarks of Apple Computer, Inc. Cinetix, One, PowerBook, and Quadra are trademarks of Apple Computer, Inc.

Novell

Novell Authorized Education Center

Med School - 400 Weeks

Law School - 300 Weeks

CNE[CLM] School - 3 Weeks!

If time is money...
CNE[CLM] School is
Time Well Spent!

- Novell-Authorized
- Instructors with field experience
- Superior Test Preparation
- Certified NetWare Engineer Quick Course (1 week)
- Satisfaction Guaranteed!!

Time is Wasting...So Call Today.

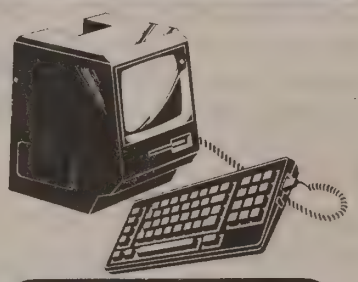
Certified Network Educators

1-800-9NOVELL
for CNE school

INTERNATIONAL COMPUTER SHOWS AND SALES

WHERE USER MEETS SELLER TO BUY, TALK OR TRADE INFORMATION ON TODAY'S HOTTEST TECHNOLOGY.

• 1994 •



APRIL 30 & MAY 1
BURBANKS'S PICKWICK CENTER
Saturday 11am to 7pm • Sunday 11am to 5pm

MAY 28 & 29
ANAHEIM CONVENTION CENTER
Saturday 11am to 7pm • Sunday 11am to 5pm

JULY 23 & 24
RIVERSIDE CONVENTION CENTER
(RAINCROSS SQUARE)
Saturday 11am to 7pm • Sunday 11am to 5pm

OCTOBER 22 & 23
PASADENA CENTER
Saturday 1pm to 7pm • Sunday 11am to 5pm

SOUTHERN CALIFORNIA'S ONLY HOME-BASED PRODUCER OF COMPUTER SHOWS WITH OVER 3 DECADES OF PRODUCING THE BIGGEST AND BEST SHOWS IN SOUTHERN CALIFORNIA.

RGCanning ATTRACTIONS

P.O. BOX 400
MAYWOOD , CA 90270

FOR **1-213-587-5100 (EVENT EXT. 4)**
INFO: **1-909-628-4236 (EVENT EXT. 50)**

So we took that, our ability to merchandise against all these giants, into the clip art marketplace, which gave us a tremendous leg up on all our clip art competitors, because it's certainly a lot easier to go up against some of our clip art competitors than it is to go up against Microsoft, or against Claris.

What we learned from merchandising in the '88–'92 timeframe played a huge role in where we are today.

HR: If you dissect it and said, "What did we do?"—

First of all, we said we have to be the best products, and we have to have the widest number of products. So we brought on board John Tompane, who's our VP of product marketing, who came from a consumer goods background. He's terrific—he's got a great design eye for packaging, and so he came on board to really consumerize the strategy.

Royal spent about six months buying other small clip art companies.

RF: If we were going to be a content company, we had to make sure we had a pretty imposing library.

Where does clip art come from?

RF: Oh, everywhere. You could sit down with your Mac, and whether you're artistic or not, you can create art. Well, people have gotten lots of products out there creating art, and they find they don't have the distribution, they don't really want to create a sales channel, they don't want to answer the phone... So there's lots of really great quality art out there.

We also got kind of creative in finding people who use art, who create big libraries of art, and don't know they're in the clip art business. We approached them and said, "We *are* in the clip art business, let us buy it." We actually found a couple of volumes of libraries from people like that.

HR: We do also commission some artists, where we go to them with a list of images we want and work together to create them.

We really work all over the board. We don't have internal artists on staff who make clip art, because we believe that's not the best use of our resources. The best use of our resources is to take clip art from wherever it comes from and create portfolios that make sense.

RF: Heidi was talking about us changing our business model.

Let's say it costs us ten units to create a piece of art. By us going out and being very selective in what we bought, but buying art on the market, we pay one unit. Now, we would bring it in and do some touch-up—we wanted to make sure we were essentially beta-testing the images and seeing that all the lines were edited out and all the color was nice and all of that. But you see that if you're going to fit into the consumer model, you can't be spending ten units for art, you have to be spending one unit for art.

HR: Royal touched on the hidden key to the business and why we've been successful—people view clip art as a very nontechnical business, but the truth is clip art is a very technical business, particularly when you're trying to do multiple platforms, dealing with issues of compression, installation, file format... You've got to understand size of image, color palette issues. All sorts of stuff that's really rather technical.

How does it look in black and white as well as color...

HR: Right, exactly. Printing...

RF: CGM, WMF, EPS... You talk to our testing group, and they'll probably tell you that clip art is an *incredibly* technical area.

And the users ultimately don't want to know anything about how technical it is.

HR: Right, and that's part of the trick, and again one of the reasons we brought John on board as somebody who would view it from the user's point of view, is to make this easy to do. But he also had a technical background.

And then we said, "Okay, where out there in the world do we have to make sure we win this year? Where are we already behind?"

We said, "The retail channel. Mail order—we can always beef up mail order.

Get up to Pentium™ Speed... Fast:

Upgradability is important to anyone with their eye on the future. We make you move to Pentium™ technology fast and easy with ZIF socket convenience.

VESA Local Bus 486

WHERE SPEED IS EVERYTHING

WARRANTY: 1 YEAR PARTS & 2 YEARS LABOR

NOT JUST VESA - TRIO VESA

Since VESA Local Bus is an industry standard, compatibility is no longer an issue. We take advantage of local bus speed by giving you 32-bit VL-Bus IDE controller, 32-bit VL-Bus graphics accelerator card with 1 MB & 16.7 mil. color support.
Together, you get greater performance and a faster Windows applications.

- ❑ 3 VESA Local Bus Slots.
- ❑ Intel Pentium Overdrive ready.
- ❑ Intel 486 Microprocessor.
- ❑ Built-in Math Co-Processor.
- ❑ Mini tower case, 230w PS
- ❑ 256K Cache of Hi-Speed RAM.
- ❑ 4MB RAM (Exp. to 32MB).
- ❑ 1.2MB & 1.44MB TEAC FDD.
- ❑ 250MB IDE 13ms HD.
- ❑ 2-serials, 1-parallel & 1-game ports.
- ❑ 101-key enhanced keyboard.
- ❑ VESA Local Bus Acc. Graphics Card 16.7 mil. color- 32 BIT 1280 x 1024-1MB.
- ❑ 14" .28 dot N.I monitor

UNBEATABLE PRICE

WE'RE SO SURE OF OUR LOW PRICE. WE'RE WILLING TO MAKE THIS PROMISE. IF YOU DISCOVER A PC WITH EQUIVALENT SPECIFICATIONS BUT WITH A LOWER ADVERTISED PRICE, WE'LL GLADLY BEAT THAT PRICE.

Please call for any customized configurations at lowest price.

We accept VISA MasterCard

Financing Available

All prices and specifications are subject to change without notice.

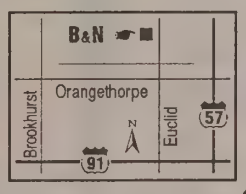
CASH PRICE ONLY

- ✧ 486DX-33 $1195
- ✧ 486DX2-50 $1295
- ✧ 486DX2-66 $1395

B&N Computer

707 South Euclid
Fullerton, CA 92632

Tel: (714) 871-5038
Fax: (714) 871-6413



ATS, INC.

ADVANCED TECHNOLOGIES AND SERVICES INC.
NATIONWIDE DISTRIBUTOR OF COMPUTERS & PERIPHERALS

INTEL/AMD CPU

486 DX-33	$ 265.00	486-40 AMD	$ 250.00
486 DX-50	$ 410.00	486 DX2-50	$ 260.00
486 DX2-66	$ 395.00	486 DX2-66	$ 380.00

HARD DRIVES

130 MB IDE	$ 175.00
260 MB IDE	$ 215.00
345 MB IDE	$ 265.00
420 MB IDE	$ 275.00
540 MB IDE	$ 399.00

MEMORY

4 Mx9 - 70ns SIMM	$ 165.00
1 Mx9 - 70ns SIMM	$ 43.00
1 Mx3 - 70ns SIMM	$ 39.00
256Kx3 - 80ns SIMM	$ 13.00

MOTHERBOARDS

VLB 486 DX 50, w/ZiF socket, w/CPU, w/256K	$ 499.00
386DX-40MHz , w/CPU, 128K Cache	$ 95.00
VLB 486SX-25MHz , w/8K int.Cache, w/CPU	$ 155.00
486-40MHz DLC, w/128K Cache, w/CPU, and Math coprocessor	$ 165.00
IBM 486SLC2-66MHz, w/64K Cache, w/CPU,	$ 235.00
IBM 486SLC2-66MHz, 2VLB, W/64 K , w/CPU,	$ 295.00
VLB 486-33MHz, w/Zip Socket, w/256K Cache, w/Int.CPU,	$ 345.00
VLB 486DX2-66MHz, w/Zip Socket, w/256 K , w/CPU,	$ 495.00

ACCESSORIES

Trident 512k VGA	$ 38.00	Mitsumi Double Speed CD ROM	$ 165.00
Trident 1MB VGA	$ 57.00	Toshiba XM3401B Int. CD ROM	$ 325.00
Oak 1MB VGA W/A	$ 58.00	NEC Triple Spin Int. CD ROM	$ 405.00
VLB IDE / IO Card	$ 28.00	NEC Triple Spin Ext. CD ROM	$ 570.00
IDE / IO Magic Card	$ 12.00	230 / 250 UL Power Supply	$ CALL
SVGA .39 Dot Monitor	$ 190.00	BTC 101 KEYBOARD	$ 16.00
Mini Tower Case, w/200W, D/D	$ 38.00	Focus FK - 2001 KEYBOARD	$ 33.00
Mid-Tower Case, w/220W, D/D	$ 59.00	Fujitsu F4700 101 Key Board	$ 40.00
Full Size Tower Case, w/250W	$ 75.00	1.2 MB 5.25 FLOPPY DRIVE	$ 38.00
Baby AT Case, for Full size AT motherboard,	$ 58.00	1.44 MB 3.5 FLOPPY DRIVE	$ 36.00
HP LASER JET 4	$ 1370	Z-NIX 3-BUTTON MOUSE	$ 10.00
HP LASER JET 4P	$ 960	DEXXA Logitech 3-Button mouse	$ 17.00

CALL US TODAY FOR OUR NEW PRODUCT & PRICE LIST

12567 CRENSHAW BLVD., HAWTHORNE, CA 90250
PH # (310) 219 -2100
FAX (310) 676 - 3481

GET A LIFE!

Use *Achieving Your Career* from Up Software to make your life happen.

The program includes 11 tools: Resumes, Letters, Database, Contacts, Calendar, Research, Progress, Interviewing, Negotiating, Calling, & Learning.

"Even if you already know the color of your parachute and have a darn good resumé, Achieving Your Career can help you turn that clutter on your desk into the valuable, organized information you need to go to work to get a job." – *Steven Hanks, Macworld Magazine, 8/93*

"What an incredible tool for job seekers! I have been working in career development for 18 years and I think job seekers really need such a well integrated organizing product."
– *Cici Mattiuzzi, Career Services, Eng. & Computer Sci., Cal. St. U., Sac.*

"Well worth the price, Achieving Your Career encourages you to build your job hunt on your accomplishments and not get stuck on your failures."
– *Ellen Dendy, Windows Magazine, 11/93*

Windows version available from TestDrive Corp. 800 788-8055

$49

Macintosh version available from MacWarehouse 800 255-6227

CALL 800 959-8208

Up Software, Inc.

MIPS' COMPUTER
Your ultimate choice!

INTEL PENTIUM VESA Local Bus

- Intel Pentium P5 Processor
- Pentium Cooling Heatsink w/Fan
- Built-in Math Co-processor
- 512K Cache, AMI BIOS
- 8MB RAM, 70ns (Exp. to 128MB)
- 1.2MB & 1.44MB TEAC Floppy
- 340MB IDE Hard Drive
- 2 Serial, 1 Parallel, 1 Game
- 32 Bit Local Bus IDE Controller
- 32 Bit Local Bus Video w/1MB (Exp. to 2MB) Max. Resolution 1280 x 1024
- 15" Non-Interlaced SVGA .28dp (Shamrock)
- 101 Enhanced Keyboard
- Digital Medium Tower w/230PS

VLB P5 60MHz....$2045
VLB P5 66MHz....$2125

INTEL 486DX VESA Local Bus

- VL-Bus Board (P24T Ready)
- AMD 80486DX Processor
- Built-in Math Co-Processor
- CPU Cooling Fan w/Heatsink
- 256K Cache, AMI BIOS
- 4MB RAM, 70ns (Exp. to 32MB)
- 1.2MB & 1.44MB TEAC Floppy
- 255MB IDE Hard Drive
- 2 Serial, 1 Parallel, 1 Game
- 32 Bit Local Bus IDE Controller
- 32 Bit Local Bus Video w/1MB (Exp. to 2MB) (Resolution up to 1280 x 1024)
- 14" Non-Interlaced SVGA .28dpi (Shamrock)
- 101 Enhanced Keyboard
- Digital Mini Tower w/230

486DX-25...$1135
486DX2-66.$1225

AMD 486DX VESA Local Bus

- VL-Bus Board (P24T Ready)
- AMD 80486DX Processor
- Built-in 80487 Math Co-processor
- 256K Cache, AMI BIOS
- 4MB RAM, 70ns (Exp. to 32MB)
- 1.2MB & 1.44MB TEAC Floppy
- 255MB IDE Hard Drive
- 2 Serial, 1 Parallel, 1 Game
- 32 Bit Local Bus IDE Controller
- 32 Bit Local Bus Video w/1MB (Exp. to 2MB) (Resolution up to 1280 x 1024)
- 14" Non-Interlaced SVGA .28dpi (Shamrock)
- 101 Enhanced Keyboard
- Digital Medium Tower w/230

486DX-40...$1125
486DX2-66.$1215

BEST BUY!

- 128K Cache, AMI BIOS
- 4MB RAM, 70ns
- 1.2MB & 1.44MB TEAC Floppy
- 255MB IDE Hard Drive
- 2 Serial, 1 Parallel, 1 Game
- 14" SVGA 1024 x 768 .39dp (Shamrock)
- SVGA Video Adapter, 512K Max. Resolution 1024 x 768
- 101 Enhanced Keyboard
- Digital Mini Case or Desktop w/200PS

486SLC2-66MHz.$935
486SX-33MHz.....$895
386DX-40MHz....$825
386SX-40MHz.....$795

VISA

MasterCard

TeleCheck

UPS

UPGRADES

4MB extra (8Mb total)	$150	Fax/Modem (14.4)	$95
16MB (total)	$480	250MB Tape Drive	$155
420MB from 250MB	$40	Double Spin Multimedia Package Complete for Only	$345
540MB from 420MB	$100		
Fax/Modem (96/24)	$40		

(909) 468-9622

Novell Certified NetWare Engineer

WARRANTY...One Year parts and labor.

TERMS and CONDITIONS

- 15 Day Money Back Guarantee with 15% Restocking Fee.
- 72 Hours Burn-in Tested.
- All Brand New Parts
- Prices & Specifications Subject to Change Without Notice.
- Prices shown are Based on 3% Cash Discount.
- Shipping & Handling Fee are Not Refundable.
- Dealer and Consultant Inquiries Welcome.
- All Software Sales are Final.
- Not Responsible for Typographical Errors.
- We Accept Government & University P.O.'s

COMPONENTS

Memory:

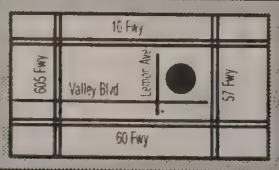
1MB x 9 SIMM, 70ns (3 Chips)	$40
4MB x 9 SIMM, 70ns (9 Chips)	$160

Vesa Local Bus Motherboard:
256K Cache, AMI BIOS (P24T Ready)

• board only w/o CPU	$95
• with Intel 486DX-33	$335
• with Intel 486DX2-66	$435
• with AMD 486DX2-40	$325
• with AMD 486DX2-66	$425
32 Bit Local Bus IDE + I/O	$25
32 Bit Local Bus Video w/1MB	$65

Hard & Floppy Drives:

TEAC 1.2MB 5.25"/1.44MB 3.5"	$45/$35
170MB	$190
250MB	$225
420MB	$265
540MB	$385



MIPSystem, Inc.
QUALITY COMPUTER PRODUCTS & SUPPORT
304 S. Lemon Ave.
Walnut, CA 91789
Tel: (909) 468-9622 Fax: (909) 468-9313
Hours: Monday-Friday 9:00-5:30

Direct mail—we can always beef up direct mail. Online isn't really there yet. But retail—if we don't win those shelves, someone else will go in and we're not going to be able to recapture them."

So we designed the whole strategy on product and packaging, really across the board on what we were going to release, working backwards from where the channels of distribution were. We said there were going to be superstores, the warehouse chains, the retail discounters—K-Mart, Wal-Mart, that kind of thing—traditional computer stores. We really went out and talked to them about "What kind of products would you like? What kind of price points? What kind of images? What level of quality do you want to see?"

Some of these stores will tell you, "I need software that sells for under twenty bucks. I almost don't care what it is, but it has to be under twenty bucks." Other people will say to you, "I need to win on image count. If I'm going to bring this thing in, I need to have more images than anybody else." Someone else will tell you, "I need the highest-quality material."

What we did was design the whole strategy on the products, slicing and dicing to make sure we had an offering for every place in the channel. And that's been tremendously successful.

We have a thing called the SSQ, the sales store quotient, which is how many units times how many stores in the chain times how many chains—we add up how many units are on the shelf. If they stock three of one thing, we don't count that as a three, it's a one—it's a measure of how much exposure we have. We went from five thousand at the end of '92 to forty-three thousand at the end of '93.

First of all, Royal had to go buy the art, so we had things to work with. Then John had to make it into products that met all these different channels' needs, and then Diane [VP of OEM and direct sales Diane Kreyenhagen] and Andrew [President and COO Andrew Preston] went out and sold the channel on it.

We have a five-member executive staff team here. Royal and I both think one of the smartest things he and I realized was that each of us had particular talents, and they weren't all-encompassing, and maybe we should set ourselves up to succeed by bringing in some really smart people to help us. One of the reasons you hit a plateau and keep going is if the management team doesn't change or grow, you're not going to change how you do stuff. So we brought in three really smart people, and that's really helped out..

It's been a very stable team—Andrew's been here almost five years, Diane's been here six and a half or seven, and John's been here two and a half.

RF: They've been here so many years that we have to have those little T/Maker service award pins.

We did go after the retail chains, and in hindsight it seemed like that was a very smart thing for us to do. Sitting back in 1992 or even a little bit before, nobody knew the superstores were going to be as big as they were; nobody really knew what to do about the consumer market for personal computers and software—everyone was still trying to figure out, "What's the magic formula to crack this market?"

So when we went down this path, it was a very, very risky thing. If anything, I think, that emphasizes Andrew's and Diane's and John's contribution to the whole thing, because it was a really big gamble for us to do—I don't want to say we were betting the company...

HR: Yes we were.

If you think about where we were a little over a year ago, the word processor market had fallen away for us, we couldn't really compete there. We were in the process of selling the word processor.

A year ago we'd just completed the transaction. We'd raised some additional money, because we spent a fortune on ClickArt development and revamping, on the anticipation that we were going to raise venture capital in, like, October of '92. Whereas it turned out, while we still owned the word processor, the VCs didn't want to fund us, because they'd say, "You're a word processing company. I'd be crazy!"

It's ironic to think that by selling the word processor off, we raised money at a better valuation. It's incredible how that works.

RF: One of the things we found is we really had a split focus, and with

SHAMROCK

The Full Screen Monitor

We Take Great Pride In Our High Quality Monitors Sold And The Excellent Service We Provide

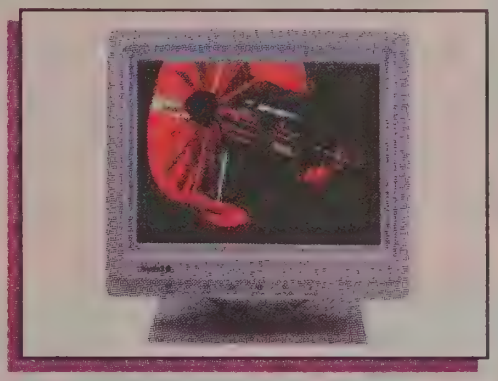
NOW AVAILABLE 21" SRC-2102

- AR Bonded Panel CRT w/Invar Shadow Mask and 0.28mm Dot Pitch
- Dynamic Focus Gun
- Wide Autoscan Capability from 30KHz to 82KHz
- Ultra High Resolution of up to 1600x1280 (Non-Interlaced)
- Two Types of 9 Pin D-Sub and 5xBNC Connectors are Provided for Optional Video Signal Connection to Prevent Image Distortion
- 20 Programmable Digital Control Memory Settings Available for Picture Sizing and Centering
- Additional Rotation Control Designed to get Exact Location of Image w/out Tilt Distortion Due to Earth Magnetic Field
- Accurate Color Control Designed to Match w/Individual Color Output Needs
- *MPR II Low Radiation*

2 YEAR WARRANTY PROGRAM IS AVAILABLE... PLEASE CONTACT US!

20" SRC-2002

- 0.28mm Dot Pitch CRT w/Invar Shadow Mask and Anti-Static Treatment
- Dynamic Focus Gun
- Wide Autoscan Capability From 30KHz to 82KHz
- Ultra High Resolution of up to 1600x1280 (Non-Interlaced)
- Two Types of 9 Pin D-Sub and 5xBNC Connectors are Provided for Optional Video Signal Connection to Prevent Image Distortion
- 20 Programmable Digital Control Memory Settings Available for Picture Sizing and Centering
- Additional Rotation Control Designed to get Exact Location of Image w/out Tilt Distortion Due to Earth Magnetic Field
- Accurate Color Control Designed to Match w/Individual Color Output Needs
- *MPR II Low Radiation*

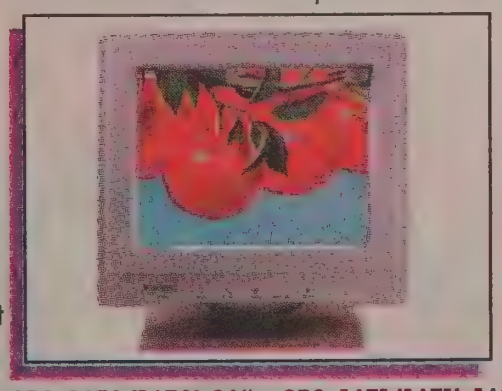


SRC-1403/SRC-1501/1501L 14", 15" SUPER VGA III

- Horizontal Frequency: 28-64KHz
- Resolution: Maximum 1280x1024 (Non-Interlaced) .28mm CRT
- Full Screen
- Compatible w/Apple Mac II
- Refresh Rate: 70Hz at 1024x768
- VESA Standard
- Automatic Pin Cushion Compensation
- *15" Only MPR II Low Radiation Available*

SRC1701/1702/1702L 17" FLAT SQUARE

- Ultra High Resolution up to 1600x1280 (Non-Interlaced)
- Two Types of 9 Pin D-SUB and 5xBNC Connectors are Provided for Optional Video Signal Connection to Prevent Image Distortion
- 20 Programmable Digital Control Memory Settings Available in SRC 1702 for Image Sizing and Centering
- Accurate Color Control Designed in SRC 1702 to Make the Displayed Color Match Closely the Printer Output
- Horizontal Frequency: 32-82KHz Continuous
- 0.26mm Dot Pitch Non-Glare, F.S.T. w/Double Focus Gun, CRT Type
- *MPR II Low Radiation Available as Option*



SRC-1452/1452L 14" SUPER VGA II

- Horizontal Frequency: 30-38KHz, 47-50KHz
- Resolution: Maximum 1024x768 (Non-Interlaced) .28mm CRT
- Full Screen
- Universal Power Supply 110/220
- Compatible With Apple Mac II
- *MPR II Low Radiation Available*

SRC-1451/1451L 14" SUPER VGA I

- Horizontal Frequency: 30-38KHz
- Resolution: Maximum 1024x768 (Interlaced) .28mm/.39mm CRT
- Full Screen
- Universal Power Supply 110/220
- Compatible w/Apple Mac II
- *MPR II Low Radiation Available*

FOR PURCHASING AND/OR OTHER INFORMATION, PLEASE CONTACT YOUR LOCAL COMPUTER DEALER.

LIGHTNING

In Windows-shattering competition, Comtrade's EISA Professional System stood head & shoulders above 191 others to win the coveted PC Magazine's Editors Choice award for best Windows Workstation, December 7, 1993. This is the sixth time in recent months that lightning has struck at the same place - Comtrade. This Comtrade EISA system also won Computer Shopper Top Ten Best Buy, PC Sources Best Buy, PC World Best Buy and Computer Buyer's Guide & Handbook Best Buy. Call Comtrade and find out how you can have the lightning speed and quality of a Comtrade system.

intel inside

PCI Dream Machine

- The Latest Intel PCI Local Bus Technology
- OverDrive Socket for **Pentium™** P24T Technology
- Ultra Fast **256K** Write-Back Cache SRAM
- **8MB** RAM & Expandable to 256MB
- Double Speed **CD-ROM** Drive
- One Floppy Drive (3.5" or 5.25")
- **530MB** 9ms PCI IDE Drive with 256K Cache
- PCI **Diamond Stealth 32 (2MB)** Graphics Accelerator (Faster than Diamond Viper)
- **15" Flat Screen .28mm Non-interlaced Monitor (36% larger edge to edge display)**
- 2 Serial, 1 Parallel & 1 Game Ports
- Enhanced 101-key Keyboard
- Hi-Resolution 400DPI Serial Mouse
- One Year Parts & Lifetime Labor Warranty

486/66 DX2 $2195
Pentium/66 $2795

- 540MB / 1080MB SCSI Drive Add $100 / $450
- MediaVision ProAudio 16 sound card Add $120

EISA / PCI SCSI-2

- Hottest 486 EISA SCSI or P5 PCI SCSI WorkStation
- OverDrive Socket for **Pentium™** P24T Technology
- Ultra Fast **256K** Write-Back Cache SRAM
- **8MB** RAM & Expandable to 128MB
- One Floppy Drive (3.5" or 5.25")
- VL-Bus / PCI Fast **ASPI** SCSI-2 Controller
- **340MB** 12ms SCSI-2 Drive with 64K Cache
- VL-Bus / PCI **ThunderPro** Graphics Accelerator with 1MB RAM (Up to 1280x1024 & up to 16.7 million Colors) (Up to 38 Million WinMark 3.11)
- **15" Flat Screen .28mm Non-interlaced Monitor (36% larger edge to edge display)**
- 2 Serial, 1 Parallel & 1 Game Ports
- Enhanced 101-key Keyboard & Serial Mouse
- One Year Parts & Lifetime Labor Warranty

486/66 DX2 $1845
Pentium/66 $2525

- Upgrade to larger 540MB SCSI-2 drive Add $120
- 17" Flat-screen Non-interlaced monitor Add $320

PCI Best Buy

- The Latest Intel PCI Local Bus Technology
- OverDrive Socket for **Pentium™** P24T Technology
- Ultra Fast **256K** Write-Back Cache SRAM
- 4 ISA and 3 PCI Local Bus Slots
- **8MB** RAM & Expandable to 256MB
- One Floppy Drive (3.5" or 5.25")
- **425MB** 12ms IDE Drive with 128K Cache
- PCI Local Bus **ThunderPro** Graphics Accelerator with 1MB RAM (Up to 1280x1024 & up to 16.7 million Colors)
- **15" Flat Screen .28mm Non-interlaced Monitor (36% larger edge to edge display)**
- 2 Serial, 1 Parallel & 1 Game Ports
- Enhanced 101-key Keyboard
- Hi-Resolution 400DPI Serial Mouse
- One Year Parts & Lifetime Labor Warranty

486/66 DX2 $1795
Pentium/66 $2425

- Double-speed CD-ROM drive Add $170
- Diamond Stealth 32 (2MB); faster than Viper $120

STRIKES!

PC MAGAZINE EDITORS' CHOICE

December 7, 1993
Comtrade EISA Professional

PC WORLD BEST BUY

January, February, 1994
Comtrade VL-Bus 486/66

VESA Local Bus Best Buy

- OverDrive Socket for **Pentium™** P24T Technology
- 128K Write-Back Cache SRAM & 2 VL-Bus Slots
- **8MB** RAM & Expandable to 64MB
- One Floppy Drive (3.5" or 5.25")
- VESA Local Bus IDE Hard Disk Controller
- **425MB** 12ms IDE Drive with 128K Cache
- 32-Bit VL-Bus **ThunderPro** Graphics Accelerator with 1MB (Up to 1280x1024 & up to 16.7 million Colors) (Up to 38 Million Winmark 3.11)
- **15" Flat Screen .28mm Non-interlaced Monitor (36% larger edge to edge display)**
- 2 Serial, 1 Parallel & 1 Game Ports
- Enhanced 101-key Keyboard & Serial Mouse
- One Year Parts & Lifetime Labor Warranty

486/33 DX $1575
486/66 DX2 $1695

- 17" Flat-screen 1280x1024 monitor Add $320
- Change 486 VL-Bus to 486 PCI Configuration Add $120

VESA Local Bus WinXpress

- OverDrive Socket for **Pentium™** P24T Technology
- 256K Write-Back Cache SRAM & 2 VL-Bus Slots
- **8MB** RAM & Expandable to 64MB
- One Floppy Drive (3.5" or 5.25")
- VESA Local Bus IDE Hard Disk Controller
- **530MB** 9ms IDE Drive with 256K Cache
- VL-Bus **Diamond Stealth 32 (2MB)** Graphics Accelerator (Faster than Diamond Viper)
- **15" Flat Screen .28mm Non-interlaced Monitor (36% larger edge to edge display)**
- 2 Serial, 1 Parallel & 1 Game Ports
- Enhanced 101-key Keyboard
- Hi-Resolution 400DPI Serial Mouse
- One Year Parts & Lifetime Labor Warranty

486/66 DX2 $1945
486/100 DX4 $2295

- 17" Flat Screen Non-Interlaced Monitor Add $320
- Double-speed CD-ROM drive Add $170

818.961.6688

Fax 818.369.1479
Hours: 9:00-7:00 Pacific Mon-Sat
15314 East Valley Blvd
City of Industry, California 91746

COMTRADE

"Where Quality is Everything"

PEACE OF MIND ■ 30-Day Money Back Guarantee ■ One Year Parts & Lifetime Labor Warranty ■ Lifetime Unlimited Technical Support ■ 8 years in business & being one of the top ten largest mail order companies in the U.S. - **Comtrade will be there for you.**

The Intel Inside Logo, Pentium, & OverDrive are trademarks of Intel Corporation.

Computerlane Inc.

VOLUME DISCOUNTS!

Corporate Accounts Welcome.
(Exports Available)

818-884-8644 & 213-625-7325 • Fax: 818-884-8253
7500 Topanga Canyon Blvd. • Canoga Park, CA 91303
Hours: M-F 9-6, Sat 10-5

Prices reflect
5% Cash Discounts

IBM

NOTEBOOKS

IBM THINKPADS

THINKPAD 350/350C 4MB RAM 150/250MB DISK
THINKPAD 750/750C 4MB RAM 170/340MB DISK
(Please Call for prices & Availability)

PS/ValuePoint Local Bus Systems

6381	W50	486DX2/66	4/212MB	$1830
6382	K50	486DX/33	4/245MB	1459
6384	N70	486DX/33	4/340MB	1725
6384	X70	486DX2/66	4/340MB	2169
6384	V50	486DX2/50	4/212MB	1699
6384	V71	486DX2/50	4/340MB	1899

MINI TOWER MODELS

6387	N50	486DX/33	4/212MB	$1699
6387	N70	486DX/33	4/340MB	1850
6387	V50	486DX2/50	4/212MB	1820
6387	V81	486DX2/50	8/420MB	2299
6387	X70	486DX2/66	4/340MB	2298
6387	X91	486DX2/66	8/527MB	2850

= All Models include local bus graphics, dos+windows+mouse.

PENTIUM MODELS (New Release)

6384 - 189	**P60/D**	**16/424MB**	**Call**
6384 - 189	**P60/D**	**16/527MB**	**Call**

(PCI local bus)
(MICRO CHANNEL MACHINES)

PS/2	90-OLF	486DX2/50	8/400MB Call
PS/2	95-OMF	486DX/50	16/400MB Call
PS/2	95-OMT	486DX/50	16/1GB Call

ARRAY SERVERS

9595	ING	486DX2/66	16/540MB Call
9595	INT	486DX2/66	16/1GB Call
9595	3NT	486DX2/66	16/ 3X1GB Call

ARRAY PENTIUM SERVERS

9595	3PG	P/60MHz	16/ 3X540MB Call
9595	3PGT	P/60MHz	16/ 3X1GBMB Call
9595	3QT	P/60MHz	16/ 3X1GBMB Call

SPECIALS

NEC 3FGe/4FGe	$650/740
NEC 5Ge/5FGP	1150/1399
NEC 6FGP/3PG	2399/2750
IBM Motherboard SLC2 50MHz/66MHz	250/295
IBM Motherboard BLC75	700
IBM PATRIOT VLB CONTROLLER/ IDE	59
IBM TOMAHAWK VLB GRAPHICS CARD 1 MB	99
PAGE MAKER 4.0	300

MODEMS

BEST DATA 24/9600 FAX	$59
INTEL SATISFAX 14.4 (int/ext)	299/355
CARDINAL 14.4 FAX	150
INTEL SATISFAX 200	250

OPTICAL DRIVES

KODAK WRITEABLE CD	Call
PINNA PL OPTICAL DRIVE	Call
PHILLIPS OPTICAL DRIVE	Call
HP OPTICAL DRIVE	Call

MULTIMEDIA

COMPLETE PACKAGE

Creative Lab Edutainment kit	$450
Pro Audio MultiMedia System II	799
Fusion Double CD 16int	499

SOUND CARDS

Sound Blaster 16	$145
Sound Blaster 16 SCSI/ SCSI ASP	220/245
Pro Audio Spectrum 16 int.	499

CD ROM DRIVES

SONY 33A	$189
SONY CDU 535/540	299/325
SONY CDU 561	459
NEC 3X1 (int/ext)	499/565
NEC 4X1 (int/ext)	Call
TOSHIBA TXM 3401 (int/ext)	Call

GRAPHICS CARD & CONTROLLER

DIAMOND VIPER 2 MB VLB	Call
DIAMOND VIPER 2 MB PCI VLB	$450
DIAMOND STEALTH 24 VLB/ISA	Call
ATI ULTRA PRO 2MB ISA/VLB	350/350
ATI ULTRA PRO 2MB EISA	399
ORCHID 1280 2MB VLB	225
ADAPTEC 1542 KIT	265
ADAPTEC 2842 VLB KIT	299
ADAPTEC 2742 EISA KIT	320
ADAPTEC mini SCSI TRANTOR	Call
ADAPTEC 1510A SCSI 16-ISA	79
ADAPTEC 1510A SCSI TAPE	165
ADAPTEC 1510A SCSI CD ROM	99

MANAGER'S SPECIALS

COMPAQ PROLINEA
486SX/25 (DESK TOP)
4MB RAM, 240MB HD,
1.44MB floppy drive,
DOS, WINDOWS, Mouse,
COMPAQ Color Monitor,
1024x768
1499

IBM PS/ VALUEPOINT
486SX/25 (DESK TOP)
4MB RAM, 212MB HD,
1.44MB floppy drive,
DOS, Windows, Mouse,
IBM SVGA Color Monitor,
1024x768
1475

HEWLETT PACKARD
VECTRA VL2 486/25e
4MB RAM, 170MB HD,
1.44MB floppy drive,
DOS, Windows, Mouse,
HP SVGA Color Monitor,
1024x768
1350

COMPAQ PROLINEA
486SX/33 (MINI TOWER)
4MB RAM, 270MB HD,
1.44MB floppy drive,
DOS, Windows, Mouse,
COMPAQ SVGA Color Monitor,
1024x768
1730

IBM PS/ VALUEPOINT
486SX/33 (DESK TOP)
4MB RAM, 212MB HD,
1.44MB floppy drive,
DOS, Windows, Mouse,
IBM SVGA Color Monitor,
1024x768
1799

HEWLETT PACKARD
VECTRA VL2 486/332
4MB RAM, 170MB HD,
1.44MB floppy drive,
DOS, Windows, Mouse,
HP SVGA Color Monitor,
1024x768
1440

HEWLETT PACKARD

PRINTERS

HP DESKJET 310	stock	$300
HP 4/ 4M	stock	1360/1825
DESKJET 560C/520	stock	CALL
HP 4SIMX./4SI		4199/2899
HP 1200C/ 1200C/ps		1360/1847
HP 550C/500C		499/415
SCAN JETIIcx./IIp		920/700
HP4L /4ML	stock	645/999
HP4P /4MP	stock	960/1320

SYSTEMS

NETSERVER LM DX2/66 16/535MB	$4799
NETSERVER LM DX2/66 16/1GB	5130
NETSERVER LM 5/60 16MB/0MB	5389
NETSERVER LM 5/60 16/1GB	6499
NETSERVER LM 5/60 16/2GB	10,489
NETSERVER LE DX2/66 8/535MB	3520
NETSERVER LE DX2/66 8/1GB	3894

PLOTTERS

DRAFTMASTER RX	Best Offer
DESIGN JET 600/650C	Best Offer

NOTE: Full product range available from Hewlett Packard like hard Drives, Optical Drives, Tape Drives, Networking Cards & Software.

NOTEBOOKS

Toshiba

T1900 486SX/A 4/200MB	Call
T 1900C 486SX/A 4/120MB/200MB	Call
T 4600 486SX/33 4/120MB/200MB	Call
T 4600C 486SL/33 4/200MB/340MB	Call
T 1950CS 486DX2/40 4/120MB/200MB	Call
T 1950CT 486DX2/40 4/200MB/340MB	Call
T 6600C /T6600CD/T 6600CDV	Call

NEW RELEASE

T1910 486SX/ 4/120MB	Call
T1910C 486SX/ 33	Call
T3400/3499C 4/120MB	Call
T4700 DX2/50 4/200/ 340MB	Call
T4700C DX2/50 4/200/ 340MB	Call

TEXAS INSTRUMENTS

T 4000E DX2/50 4/200MB (Active Color)	Call
T 4000E 486SX25 4/120MB(Color)	Call
T 4000E DX2/50 4/200MB(Mono)	Call

NEC TECHNOLOGIES

VERSA 486DX2/40 4/200/340MB	Call
VERSA 486DX2/50 4/200/340MB	Call
VERSA C 486DX2/50 4/200/340MB	Call
VERSA C 486DX2/50 4/200/340MB	Call

HEWLETT PACKARD

OMNI BOOK 300 386/25MHz 2/40MB	Call
OMNI BOOK 300 386/25MHz 2/10MB	Call
OMNI BOOK 486/25 4/40MB	Call

75MHz NOTEBOOKS

COMPAQ 76 MHz	Call
TOSHIBA 76 MHz	Call
NEC VERSA 76 MHz	Call
TEXAS INSTRUMENT 76 MHz	Call

SPECIAL PRICING!

ACS UNBEATABLE QUALITY IBM COMPATIBLE PRICES

486DLC-40MHz
MINI TOWER KIT
BUILD YOUR OWN
80486 DLC-40MHz CPU
1MB RAM Expandable to 32MB
2 Hard / 2 Floppy Controller
3.5" 1.4MB Floppy Drive
Keyboard Clock / Calendar
Case / Power Supply
#1856275
$369

486SLC-33MHz
MINI TOWER KIT
BUILD YOUR OWN
486 SLC-33MHz CPU
Motherboard
1MB RAM
3.5" 1.4MB Floppy Drive
IDE Floppy / Hard Controller
Keyboard
Case / Power Supply
#1886757
$319

COMPAQ

Contura Areo 4/25 4/84MB/ 170MB	$1350/1630
Contura Areo 4/33C 4/170MB/ 250MB	2099/Call
Concerto 4/25 4/120MB/ 250MB	1980/2199
Concerto 4/33 4/250MB	2350
Contura Notebook 4/25, 4/120	1699
Contura Notebook 4/25 Color, 4/120	2050

NEW BIG RELEASE

LTE Lite 4/40C MHz SERIES	Call
LTE Lite 4/50C MHz SERIES	Call
LTE Lite 4/40CX & 4/50CX MHz SERIES	Call
LTE Lite 4/75MHz With 510MB Disk	Call

(All New LTE Lite Models have PCMCIA slots)

PROLINEA DESKTOP SERIES

ProLinea 4/25S 4/120MB/ 240MB	$1050/1450
ProLinea 4/50, 4/240MB	1659
ProLinea 4/66, 4/240MB	1875

PROLINEA MINI TOWER SERIES

ProLinea 486/33s 4/340MB	$1599
ProLinea 486/33s CDS 4/340MB	1899
ProLinea DX2/50 4/340MB/ 525MB	1899/2230
ProLinea DX2/66 4/340MB/ 525MB	2099/2299

(All ProLinea Systems are Local Bus)

DESKPRO XE SERIES

Deskpro XE 486/33s 4/170MB	$1520
Deskpro XE DX2/66 4/270MB/ 525MB	Call
Deskpro XE 5/60 8/270MB/ 525MB	Call

DESKPRO SERIES

Deskpro 4/33M, 4/340MB Win	Call
Deskpro 4/50M, 8/240MB Win	Call
Deskpro 4/66M, 8/240MB Win	Call
Deskpro 5/60M, 8/270MB/ 525MB	4250
Deskpro 5/66M, 8/525MB	5599

•All COMPAQs include: DOS+Windows 3.1 & Mouse
•CDS Models include: Sound card+CD-ROM Drive & Much BONUS CD-ROM software

NEW SERVERS

Prosignia VS DX2/66 model 1	VERY
Prosignia VS DX2/66 with SCSI 535MB	SPECIAL
Prosignia VS DX2/66 with SCSI 1GB	PRICE

POWERFUL SERVERS

Proliant 1000 DX2/66 model 1	Call
Proliant 1000 5/60 model 1	Call
Proliant 2000 DX2/66 model 1	Call
Proliant 2000 5/60 model 1	Call
Prosignia DX2/66 model 1	Call
Prosignia 5/60 model 1	Call

NOVELL

NETWARE 3.12		NETWARE 4.01	
5 USER	Call	5 USER	Call
10 USER	Call	10 USER	$1595
25 USER	$825	25 USER	Call
50 USER	Call	50 USER	Call
100 USER	Call	100 USER	Call

PRINTERS

EPSON LQ 810/1170	$465/620
EPSON DFX 5000	1365
EPSON DFX 8000	2257
EPSON LASER 1500	675
EPSON LASER 1000	635
EPSON STYLUS 800	340
OKI ML 320/321	315/440
OKI ML 590/591	440/585
OKI OL 400E/e/810	525/899
CANON BJ 10SX/BJ-200	250/350
CANON BJ 600	1640
KODAK DICONIX 180SI	235
CITIZEN PN48	230

* CALL FOR ALL MAJOR BRANDS

TAPE BACK-UP DRIVES

Colorado Jumbo 120/250(int)	$135/185
Colorado Trakker 120/250(ext)	250/359
Sysquest 88MB Int/Ext	525/625
Colorado Power Tape 2GB (int)	985
Colorado Power Tape 2GB (ext)	1120
Colorado Power Tape 4GB (int)	1199
Colorado Power Tape 4GB (ext)	1365
Wangtek 525/1GB (int)	560/720
Wangtek 4GB (int)	1099

HARD DISKS

CONNER 120/250MB	$190/240
CONNER 340/540MB	310/585
CONNER 1.2GB	999
WESTERN DIGITAL 420MB	310
QUANTUM 270MB	300
QUANTUM 340/540MB	310/550
MAXTOR 120/250MB	190/255
MAXTOR 340/540MB	320/590
MAXTOR 1GB	1230
MICROPOLIS 1GB (SPECIAL)	899
MICROPOLIS 1.7GB/ 2.1GB	1260/1550

CALL FOR QUANTITY DISCOUNTS

WriteNow and ClickArt, we were always worrying 50% on one and 50% on the other. By focusing on content, although it was a small market, all of sudden we were the leaders in this thing called content, versus just being a 10–15% market share participant in a much larger marketplace. It's a much better story.

HR: The investors realized that while the focus was split, you weren't going to be an innovator in the secondary product line. So even when we were putting that as our first product line, people didn't believe our story. They'd walk in and we'd still sort of have WriteNow written all over us.

We had an incredible year last year. We did pretty much run out of all our cash...

RF: Last year at this time you might have seen some grim reaper figures walking by...

HR: We laid off 30% of the employees.

RF: Half of that came from the WriteNow transfer.

HR: But then what happened is we went from being an $8 million company to being a $4 million company, like that. So you can't keep around as many admin people, as many support—you have to just say, "We're going to have to rebuild. And we're going to have to see if the revenues support it on the strength of the products that we've built."

We did not want to cut our product development, we didn't want to cut our budget for packaging and inventory, because that was what was going to make us successful.

RF: Our VCs said, well, you've got to come to the table here. You've got to make a profit.

HR: The happy ending to the story is, luckily, everything we put in place worked.

RF: Knocking on wood...

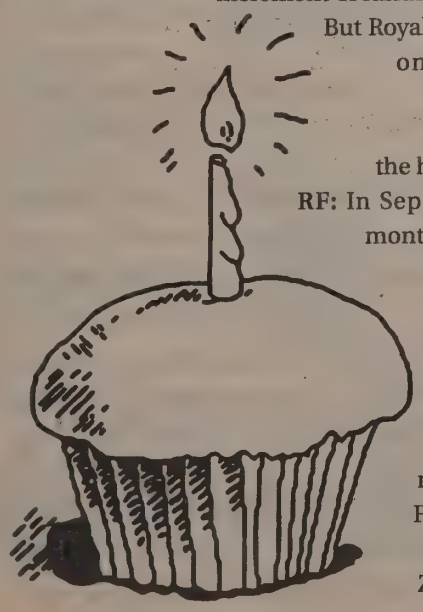
HR: March is coming in good, February came in good. We watch the numbers every month, because one of the things we learned as managers is that it's really a lot easier to run a profitable company than an unprofitable company. The decisions you make are a lot more pleasant.

RF: It was a nice slow ramp-up, and then it was fun, because all of a sudden there was a whole bunch of morale associated with it; everyone was profit-oriented. We had a little profit, then a little bigger profit, a little bigger profit, three or four months' profitability in a row, and all of a sudden success started building on success. A lot of the investment that we had made while we were unprofitable—a lot of that stuff started kicking in.

Then we started saying, "Well, wait a m[illegible]ite, maybe we're only clogging the channel," because in the consumer market you have to watch out for returns. So we started paying more attention, and we were surprised that all of a sudden, we really were selling through.

HR: We have a strong focus on profitability. Even though we could go out and raise money at a substantially higher valuation now, we don't do it because we really believe we can fuel our growth internally.

Having said that, we may come upon something where we need a large increment of funds and we may choose to go out and raise it. But Royal and I between us still own over 50%, and one of the reasons is we've been careful about the money we've raised. We've raised about $2 million in the history of the company.



RF: In September we had our first million-dollar month that was a non-upgrade situation. It was just doing business as usual. So we were all excited about that.

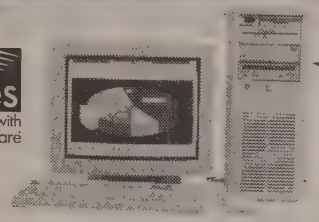
HR: And then we had another one!

And now we're getting to the size where what we have to think about as we go forward is "What do you do now?"

First of all, we want to make sure we continue to lead in the ClickArt area, then ZoomBooks, which is a whole different

IBM486/66Mhz
VESA LOCAL BUS 32 BIT ALL THE WAY

yes It runs with NetWare



$888* Complete System

* 14" SVGA Color Monitor 1024x768 .28DP add: $225

ALL SYSTEMS INCLUDE:
IBM 486SLC2/66 MHz CPU, 16KB Cache
VESA LOCAL BUS 32 bit Motherboard
Motherboard and CPU Made by IBM
Math Coprocessor, 64K Cache, 4 MB RAM
32 bit VESA SVGA Windows Accelerator card
32 bit VESA Local Bus IDE Controller
250 MB Hard Disk Drive, 1.44 MB Floppy
Mini Tower w/ 230w (UL) Power Supply
Enhanced Keyboard 101 key, Hi Res Mouse
2 Serial 1 Parallel 1 Game Ports, Mouse Pad

IBM Quality. Made in USA. 3 Year Warranty

CALL FOR OTHER OPTIONS AND CONFIGURATIONS !

INTEL 486DX2-66
256K Cache, 3 VESA Slots, P24T ready
PENTIUM READY
$1145 Complete System

MULTI MEDIA KIT
Includes Double speed CD ROM Drive, 16 Bit Sound Card , 2 Speakers MM software and 5 CD-ROM Titles
Add $325

NOVELL GOLD AUTHORIZED CNE HP Dealer

Networking Specialists
CompuNet Solutions
17616 Sherman Way at White Oak, Van Nuys, CA 91406
(818) 881-6123

IBM Business Partner ALR, AST COMPAQ

Prices and Specifications are subject to change. Listed prices reflect a cash discount.

DISCOVER THE INTERNET
FOR ONLY
$17.50
A MONTH

Unlimited access with no hourly connect fees!
Why pay long distance phone charges?

CRL brings the Internet to you with a local call from any of the following areas:

•Alamitos	•Compton	•Hawthorne	•Mar Vista	•Placentia
•Alhambra	•Culver City	•Huntington Beach	•Montebello	•San Francisco
•Anaheim	•Cypress	•Inglewood	•Norwalk	•Santa Ana
•Atlanta, GA	•Downey	•Irvine	•N. Hollywood	•Scottsdale, AZ
•Beverly Hills	•Fullerton	•La Canada	•Orange	•Tempe, AZ
•Boston, MA	•Garden Grove	•La Crescenta	•Pasadena	•West Los Angeles
•Brea	•Gardena	•La Habra	•Phoenix, AZ	•Westminster
•Buena Park	•Glendale	•Los Angeles	•Pico Rivera	•Yorba Linda

CRL offers a full range of Internet services including: Telnet, FTP, E-Mail, Usenet News, Gopher, WAIS, IRC, MUDs, access to local CRL software archives, and 24 hour customer support. All dialups support SLIP/PPP, UUCP and Shell services at speeds up to 14400 baud.
Contact CRL for your dialup or dedicated line service needs.
Shell account paid by VISA/MC, $19.50 Int. Fee.

CRL

VOICE: 415-381-2800
FAX: 213-236-9944
714-517-6700
E MAIL: support @ crl. com

CHECK OUR PRICES.
You Won't Go Anywhere Else.

Intel/AMD 486DX/DX2 System

- 486 VESA Local Bus, P24T Ready
- Three VLB Slots
- 256K Cache
- 4MB RAM Expandable to 32MB
- VL-Bus IDE I/O Card
- 2 Serial, 1 Parallel, 1 Game Port
- 32-Bit VL-Bus Windows Accelerator Card (1MB Exp. to 2MB 1280 x 1024)
- 250MB IDE HDD
- TEAC 1.2 & 1.44MB FDD
- 14" Shamrock .28 NI Monitor
- Euro Series Mini Tower or Desktop w/230W UL Listed P/S
- 101 Key Keyboard
- Mouse & Mouse Pad

CPU TYPE	PRICE
Intel 486DX-33	$1250
Intel 486DX-50	1410
Intel 486DX2-66	1450
AMD 486DX-40	1225
AMD 486DX2-50	1295
AMD 486DX2-66	1380

IBM SLC2-66VLB System

- IBM 486SLC2-66MHz VESA Local Bus w/CPU & Math Coprocessor
- 64K Cache Expandable to 128K
- 4MB RAM
- VL-Bus IDE I/O Card
- 2 Serial, 1 Parallel, 1 Game Port
- 32-Bit VL-Bus Windows Accelerator Card (1MB Exp. to 2MB 1280 x 1024)
- 250MB IDE HDD
- TEAC 1.2 & 1.44MB FDD
- 14" Shamrock .28 NI Monitor
- Euro Series Mini Tower or Desktop w/230W UL Listed P/S
- 101 Key Keyboard
- Mouse & Mouse Pad

$1195

Upgrade Options

4MB TO 8MB	$160
250MB TO 340MB IDE HDD	50
250MB TO 420MB IDE HDD	90
14" TO 15" .28 SVGA	135
MINI TOWER TO MED. TOWER	20
MINI TOWER TO FULL TOWER	30
MINI TOWER TO SLIM CASE	10

Multimedia

Mitsumi Double Speed CD ROM 005	$190
Panasonic Double Speed CD ROM 563	190
NEC C3X1 SCSI CD Triple Speed	395
Sony 33A w/CC Double Speed	205
NEC CD-84J SCSI Double Speed	270
Spectrum Pro 16	135
Sound Blaster 16 SCSI/ASP	220

CALL FOR DEALER PRICING

- Price and Availability Subject to Change Without Notice.
- All Trademarks and Logos are the Property of their Respective Companies
- All Systems Carry a One Year Parts and Two Years Labor Warranty
- 72 Hours Burn-In Time Before Shipping & Labor Warranty
- Government, School & Corporation PO's are Welcome

CLIMAX ENTERPRISE
20766 Carrey Road
Walnut, CA 91789
Tel: (909) 468-9369
Fax: (909) 468-1909
Hours: MON.-FRI. 9:00 - 5:30
Sat. 10:00 - 3:00

MICROSHOP BRINGS HEWLETT PACKARD TO YOUR DESKTOP

HP LaserJet 4 Printer

- 600 dpi print quality at a 300 dpi price
- Fast 8 ppm printing for complex documents
- Full network capabilities (w/options)
- Easy to use

HP LaserJet 4 Printer
HP LaserJet 4M Printer

HP LaserJet 4L Printer
HP LaserJet 4ML Printer

Lowest Priced HP LaserJet Printer...EVER!

- Provides complete business printing functionality.
- PowerPostscript printer at a surprisingly affordable price.

HP LaserJet 4L Printer.....$639

- 4 ppm with 26 scalable type faces
- 300 dpi print quality, with Resolution Enhancement technology and microfine toner
- Genuine Enhanced PCL5
- Memory Enhancement Technology effectively doubles your 1MB printer memory
- HP Explorer software...your on-screen guide to easy printing!
- Costs less!

HP OmniBook 300/430 Superportable PC..$CALL

- Easy-to-carry portable computer
- Worry-free hours of PC battery life
- Easy-to-use portable computer
- Just turn-it-on portable computing
- Less than 3 pounds! And it's ready to go!
- Super light-weight, super battery life
- Power to match your work style with built-in Microsoft Windows, Microsoft Word, and Microsoft Excel

HP Vectra VL2 PC Series....$CALL

HP Vectra 486/25VL2 PC
HP Vectra 486/33VL2 PC
HP Vectra 486/66VL2 PC

- 486 processing power for a 386 price
- Excellent graphics performance
- A simple upgrade path... HP quality and reliability
- Call for all other Vectra Machines

CALL For All VECTRA Pricing

HP DESKJET 560C.....$545

- 600x300 dpi
- Built-in ColorSmart technology that automatically delivers optimal color output
- 35 scalable TrueType fonts

HP DESKJET 500C.....$379

- 300 dpi inkjet technology provides high-quality black printing
- Affordable price
- Quiet operation

HP DESKWRITER 520..$279

- 600x300 dpi
- Compatible with an extensive range of popular Macintosh software
- Industry-leading 3-year warranty

HP LASERJET 4P.....$915

- 600 dpi
- 4 ppm
- 250 sheet paper standard

Microshop
COMPUTER PRODUCTS
2630 Walnut Ave., Unit C, Tustin, CA 92680
714-838-7530 • FAX 714-544-9257
Authorized Sales and Service Dealer
OPEN: Mon. - Fri. 9am to 5pm

IN TOUCH WITH TOMORROW TOSHIBA
HEWLETT PACKARD Authorized Dealer
Advertising prices reflect 3% cash discount.
Corporate & Aerospace purchase orders accepted.
Prices & availability are subject to change without notice.
Authorized Reseller
COMPAQ

area to talk about, and then the third thing we're doing to try and secure our future is some new venture-type activities.

I'll bring ZoomBooks into the picture before we talk about joint ventures, because in a way we built products and expertise in the company, and then we said, "How can we joint venture out there to make these more successful?"

Maybe it's because we're getting older, or because we started having kids, or I don't know what, or just because multimedia was exciting and a lot of us were personally interested in it.

RF: We were looking for anything with a little more polish than word processors.

HR: Right, we wanted to sell these people with sizzle. Image content—while we felt it had a lot of sizzle, a lot of people didn't think so. So we thought, "What can we get into that we really know something about?"

And we decided that we knew something about multimedia, because after all, we already know about the consumer price points, we know about the channels, we know about the machines they're running on, and we certainly know about the image content component.

RF: And we have a sense of what good interface is all about.

HR: Also, as many of us were becoming parents, we had a reasonably good sense about what parents want to buy for their kids.

When you spend all your time at Toys R Us, you start thinking—

HR: "Hey, I could make that!"

Luckily also serendipity occurred, and Bill Rollinson, who had been an associate of ours many years past, started a company to make multimedia children's software. He went out looking for funding and came to Royal as a friend to look over his business plan. To make a long story short, we liked it so much we bought the company.

Believe me, last year that was an area that was difficult to invest money in, because when you're looking at your core business and thinking, "How am I going to make ends meet?..." As I said, the one thing we didn't want to do was cut development on any new technology. There was a time where it was pretty tough to keep it going, because it's very expensive to develop multimedia titles.

RF: We looked at it as pretty strategically aligned with where we were heading under the multimedia or content umbrella.

Content comes in many forms—there's static art, there's moving art, animation, there's sounds, there's actual information content. You start combining all those things, then you create something that could be called a movie. Or maybe called an animated storybook.

We said, "This is our playground. This is where we're going to have to be. Acquiring this type of company is going to give us a lot of expertise at combining all the different elements that we already have in the company, and kicking out something that's synergistically greater."

HR: When we bought it, it was just a seed startup with a little bit of development and two employees. Now that group has twelve, fourteen people; they've got three projects going on for future titles.

Stradiwackius will be released around April 20, and then we're working on our own second project, and then we have a joint venture with somebody.

Where do you see CD-ROMs going? Four-Footed Friends shipped in a floppy and a CD-ROM version, but the CD-ROM version had a lot more on it.

HR: I think we should never have shipped a floppy product. Royal and I differ on this, but I think we should have gone right to CD because the CD is so much more robust and has so much more to it. It's so live.

At the time it was a tough call, though—the drives weren't being bundled and it was a big question whether they'd catch on.

AUTHORIZED DEALER & SERVICE CENTER

PRICE BUSTER CALL NOW!

APPLE MACINTOSH POWERBOOK® 145B

- 68030 Processor
- 25MHz
- 4/80 Floppy Adapter

$1274

PB 4/120...$1488

APPLE MACINTOSH POWERBOOK DUO™ 230

- 68030 Processor
- 33MHz
- 4/80 Floppy Adapter

$1399.99

APPLE MACINTOSH POWERBOOK® 165

- 33MHz • 4MB • 80MB HD

$1586

*4/160 .....$1883
*4/160/MD.....$2095

APPLE MACINTOSH POWERBOOK DUO™ 230

- 68030 Processor
- 33MHz
- 4/160 Floppy Adapter

$2199

APPLE MACINTOSH POWERBOOK® 180C

- 33MHz Active Matrix
- 4MB • 80MB HD

$2329

*4/160.....$2559
*4/160/MD.....$2768

APPLE POWER MACINTOSH™ 6100/60 8/160

- 60MHz Processor
- 8MB RAM Upgradable To 136MB
- 160MB HD
- CD-ROM Bay, Mouse
- Monitor and KB not Included

$1621

8/250 CD.....$2041
8/250CD AV $2311
16/250 .....$2244
(DOS COMPATIBLE)

APPLE POWER MACINTOSH™ 7100/66 8/250

- 60MHz PROCESSOR
- 8MB RAM UPGRADABLE TO 136MB
- 250MB HD
- CD-ROM, Mouse
- Monitor and KB not Included

$2572

.8/250CD.....$2830
.8/500AV CD ..$3538
.16/250 .....$2997
(DOS COMPATIBLE)

APPLE POWER MACINTOSH™ 8100/80 8/250

- 80MHz PROCESSOR
- 8MB RAM UPGRADABLE TO 136MB
- 250MB HD
- CD-ROM bay, Mouse
- Monitor and KB not Included

8/250CD.....$3931
16/500AVCD ..$4933
16/1000CD.....$5278
16/500 .....$4625
(DOS COMPATIBLE)

$3696

APPLE STYLE WRITER II

- 360 dots-per-inch quality
- Grayscale printing
- 35 built-in-fonts

$269

APPLE LASERWRITER SELECT™ 310

- 300dpi
- 1.5MB Ram
- 5 page PM

$759

APPLE LASERWRITER PRO™ 630

- 600dpi
- 8MB
- Adobe Postscript II
- 8 Page PM

$1869

APPLE LASERWRITER SELECT™ 360

- 600dpi
- 7MB
- Adobe Postscript II
- 10 Page PM

$1399

APPLE LASERWRITER PRO™ 810

- 300, 400, 600 or 800 dpi
- 8MB
- 64 Scalable fonts
- 20 page PM

$4336

APPLE MACINTOSH QUADRA® 610 8/160

- 25 MHz Motorola 68040 Processor
- 8MB Expandable to 68MB
- 160MB HD
- Mouse
- KB and Monitor not included

$1288

Quadra 8/230 .$1620
Quadra 8/230/CD$1849

APPLE MACINTOSH QUADRA® 660AV 8/230

- 25MHz G68040 25/55 DSP
- 8MB Expandable to 68MB
- 230MB HD
- Mouse
- KB and Monitor not incl

$1667

Quadra 8/230/CD$1899

APPLE MACINTOSH QUADRA® 650 8/230

- 33MHz Motorola 68040 Processor Math Cp-pro.
- 8MB Expandable to 132MB
- 230MB HD
- Mouse
- KB and Monitor not included

$1899

Quadra 8/230/CD$2199

APPLE MACINTOSH QUADRA® 840AV 8/230

- 40MHz 68040 25/55 DSP
- 66MHz Digital signal processor
- 8MB Expandable to 68MB
- 230MB HD
- Mouse
- KB and Monitor not included

8/230/CD.....$2995

$2788

APPLE MACINTOSH QUADRA 950® 8/230

- 33MHz 040
- Dual SCSI Capability
- 8MB Expandable to 68MB
- 230MB HD
- Mouse
- KB and Monitor not include

8/500 .....$3340
16/1GB.....$3899

$2995

HP LASER

HP4L	$635
HP4ML	$950
HP4P	$935
HP4MP	$1325
HP4+	$CALL
HP 4	$1339
HP 4M	$1899
HP 4SI	$2850
HP4SIMX	$4150

HP INKJET PRINTERS

DJ 310 W/SHFDR	$375
DJ/WRITER 310	$299/299
DJ/WRITER 520	$275/285
DJ/WRITER 500C	$385/395
DJ/WRITER 560C	$565/565
DJ 1200C P/S	$2250
PAINTJET XL300	$2195

HP SCANNERS

SCANJET IIP F/AT	$475
SCANJET IIP F/MAC	$475
SCANJET IICX F/AT	$949
SCANJET IICX F/MAC	$949
DOC FEEDER F/IICX	$465
DOC FEEDER F/IIP	$265

EPSON

LX 810	$185
FX 870/1070	$279/365
FX1170	$359
LQ570+/1070+	249/375
LQ870/1170	$445/605
LQ2550	$920
DFX 5000	$1325
DFX8000	$2250
EPL 8000	$895

OKIDATA

ML184	$225
ML320/321	305/415
ML 380	220
ML 590/591	420/565
ML395	925
OL 400E	495
OL410	625
DOC-IT 3000	$1835
DOC-IT 4000	$2195

NEC, AST, IBM, LEXMARK, TOSHIBA, CITIZEN, COMPAQ, ONSITE SERVICE, NETWORKING & CUSTOM CONFIGURATION AVAILABLE

Apple, the Apple logo, LaserWriter, StyleWriter, Mac & Macintosh are registered trademarks of Apple Computer Inc. PostScript is a trade mark of Adobe Systems Inc., Classic is a regisered trademark, licensed to Apple Computer Inc., PowerBook Duo, Macintosh System 7 & Macintosh Centris are trademarks of Apple Computer Inc

ADVANCED MICRO SYSTEMS, INC.

9212 COLORADO AVE., #100 · SANTA MONICA, CA 90404
(310)829-3443 · FAX (310)315-1009

PRICES SUBJECT TO CHANGE. PRICES GOOD WHILE SUPPLY LASTS.

HR: And we wanted to provide the experience to people who didn't have CD-ROMs.
RF: We had some pretty robust discussions in the company in 1993, because even though CDs were the greatest-hyped thing in the entire world, if you actually looked at a lot of the sale numbers for CDs, they were very small.
HR: There were two big groups of people who hurt us in the process of shipping a floppy title. One was the press, because press wasn't interested in floppy titles. Most people said, "If it isn't CD-ROM I don't even want to look at it," because that's the new way. The second was the retailers—they were trying to build something and they really preferred CD-ROM. To make a long story short, we're doing CD-ROM only now.
RF: We were also doing that in the reality of the marketplace. The bottom line is, last year was a reasonable year for CD-ROM; this Christmas will be a pretty good year for CD-ROM, and then next year if a machine comes without CD-ROM it'll be like coming without a hard drive.
HR: The other reason is the nature of the type of work we decided we wanted to do. It was intellectually appealing to us, in that we felt we would buy it for our own children, it's just the stuff's too big to go on floppies. The truth is, in order to get that kind of richness, we couldn't fit it on a floppy any more, so given our strategy for those titles, we couldn't do it.

I think the big mistake people make who make software for kids is that they always think that kids have a lower bar of acceptability because they're kids. The truth is they have a higher bar, because they're trained on things like Learning Channel, Nickelodeon, Sesame Street, Disney video. They have a sense of what quality sound and video and animation ought to look like, and that's one reason why this stuff's so expensive to create, is because you've got to meet the kids' expectations. They're willing to wait a little for the computer to come around and bring them the material, but when it finally shows up, it better be good. That's definitely one of the things we've been learning.

I think one of things you'll see in the difference between our first title and Stradiwackius is that we're trying to incorporate more randomness and richness into the learning experience, so the games aren't just one game every time, but every time you bring it up it's randomizing from a bunch of different choices, so it comes up with a different thing so you can play the game an infinite number of times and always have a new experience.
RF: Our success with ClickArt was based on having a series of products, and one of the reasons our development is working so hot and heavy is we really want to have a whole series of ZoomBooks out there. So when you look at it in the retail shelf, it's not just one thing sitting up there all by its lonesome.

It's Little Golden Books for the digital age.

HR: Exactly.

We're working with a major television network to create titles based on their content. We're really excited about that, because they came to us after seeing the quality of our first title, the CD-ROM Four-Footed Friends.

The interesting nature of the deal is that they're publishing the software and paying us a royalty. It's a unique situation, because we're a publisher but we're also a developer. The reason we did that deal is it brings us a lot of credibility, working with a player like that, and they will help us get down the learning curve of building more titles. If you're internally funding and paying royalties to someone else, it's a lot of money to run these projects. But if someone else is coming to you and they basically cover the project...
RF: This follows up on creating new channels, as well. From a marketing point of view, it makes a lot of sense. They've got five or six hours of uninterrupted programming for kids every morning. We don't really compete with anyone there—again, we may sell against Brøderbund in the retail channel, but on the TV channel, we're kind of there by our lonesome with our strategic partner.
HR: And we want to see how they do. It's an interesting experiment for us, it's very profitable, we get a royalty on the deal, we're recognized as the author on the packaging, so we have exposure, but it's not our title. It's a backwards relationship from what you think we would do as a company.
RF: They're just great to work with. It's nice when you put a lot of effort into something—like our little characters' mouth movements, so it actually looks like they're mouthing the words—that took a lot of time. Even though 80% of the people may not overtly notice it, *they* noticed that kind of stuff. It's really nice to work with a partner who appreciates that type of thing.

One of the technical things we're trying to create is a standard children's interface. About 30–40% of any ZoomBook title is transferable between titles.
HR: Because it's underlying code, it's the interface. It's the basics of the program. That's one of the things we're trying to do, refine how that works, so that as we create new titles, we're making it easier and easier for kids to use better and better, faster and faster...
RF: The first title took X to get out, the second title is only going to take 60%X, and as we refine it more it'll take shorter and shorter periods of time to get titles out the door. And from a technical point of view, that's very important to us, because we don't see anybody else really trying to come up with almost an application framework for storybooks and then plug into that. If you look at a lot of stuff that Brøderbund does, and other people, they're almost reinventing the wheel with each title.
HR: We're trying to integrate our approach so we're building on something. You might think we put the deals together at random, and sometimes we feel like we do, but the truth is the big reason we wanted this particular alliance is not just because it was funding a development project, but who they are and what they represent in terms of marketing opportunities down the road.

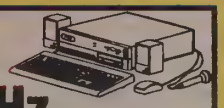
The same thing we've done when we licensed *The Great Escape of Marvin the Ape* from Penguin, which is a top-selling Penguin title. Again, the idea was to work with a book publisher. We're writing the software, we are the publisher, we pay them the royalty, but the idea being that they are interested in comarketing through their channels.

The whole idea is that we can experiment in different channels and see, without blowing any big money on it, because we're interested in profits, to figure out how this whole children's market is going to evolve.

That's one of the ways we think a small company can succeed in the industry—if you have some partnerships with some big players, and not necessarily in the software business. We're in an industry that's always looked internally for our alliances, we all ally with each other. The truth is, there are a lot of companies outside the industry, and we have a number of successful joint ventures that are helping us to fund our growth and providing stability for the future. Companies outside the industry, where we're bringing software expertise to them.

We feel like we're covering a lot more bases now.
RF: That in itself is a brand new channel. Whereas our main channel was consumer-oriented retail back in 1992–93, what we're looking at in '94–'95 is obviously a continuation of direct mail and consumer channels, but it's how we plug in to somebody who may themselves have an installed base of twenty million people that we can sell into. When we plug into that type of strategic partner, we're not competing with Brøderbund, we're not competing with Microsoft, it's us and them as a strategic partnership selling to their gazillion installed base. ■

COMPAQ



COMPAQ 486SX-33MHz

PRESARIO 633 CDS

200MB MULTIMEDIA SYSTEM

486SX-33MHz CPU • 200MB Hard Drive • 4MB RAM expandable to 32MB • 3.5" 1.44MB Floppy Drive • CD-ROM drive (dual-Speed) • SoundBlaster 16 Audio Board • External speakers and microphone • Local BUS video graphics • 2 ISA expansion slots • 3 drive bays • Internal fax/modem • Mouse **Preinstalled software:** MS DOS • MS Windows 3.1 TabWorks • Microsoft Works • CD-ROM titles • Prodigy • America On-Line • Microsoft Entertainment Pack • Symantec Games Pack Delrina WinFax Lite • **Monitor Not Included**

$1699

#1866924

COMPAQ 486DX2-50MHz

PRESARIO 850

270MB MINI SYSTEM

486DX2-50MHz CPU • 270MB Hard Drive • 4MB RAM expandable to 56MB Dual Floppy Drive • Local BUS video graphics • 5 ISA expansion slots 5 drive bays • Intergrated fax/modem • Supports Intel OverDrive processor (486DX2/66), as well as future OverDrive processor with Pentium technology **Preinstalled software:** MS DOS • TabWorks • MS Windows 3.1 • MS Works Delrina WinFax Lite • Prodigy • America On-Line • Microsoft Entertainment Pack Symantec Games Pack • **Monitor Not Included**

$1699

#1866946

COMPAQ 486SX-33MHz

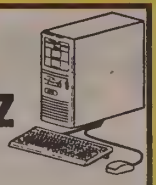
PRESARIO 833 CDS

270MB MINI SYSTEM

486SX-33MHz CPU • 270MB Hard Drive • 4MB RAM expandable to 56MB • Dual Floppy Drive • CD ROM drive (Dual-Speed) • SoundBlaster 16 Audio Board • External speakers and microphone • Local BUS video graphics 4 ISA expansion slots • 5 drive bays • Intergrated fax/modem Supports Intel OverDrive processor(486DX2/66), as well as future OverDrive processor with Pentium technology • **Preinstalled software:** MS DOS • TabWorks • MS Windows 3.1 • COMPAC Mouse • Microsoft Works • Delrina WinFax Lite • Prodigy • America On-Line • Microsoft • Entertainment Pack Symantec Games Pack • CD ROM Titles. **Monitor Not Included**

$1999

#1866935



COMPAQ 486DX2-66MHz

PRESARIO 866

340MB MINI TOWER SYSTEM

486DX2-66MHz CPU • 340MB Hard Drive • 4MB RAM expandable to 56MB Dual Floppy Drive • Local BUS video graphics • 5 ISA expansion slots Mouse • 5 drive bays • Internal fax/modem Supports Intel OverDrive processor(486DX2/66), as well as future OverDrive processor with Pentium technology

Preinstalled software: MS DOS • TabWorks • MS Windows Workgroups Microsoft Works • Delrina WinFax Lite • Prodigy • America On-Line • Microsoft Entertainment Pack • Symantec Games Pack • Monitor Not Included

$2199

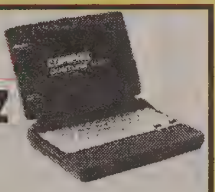
#1866968

COMPAQ 1024X 768 .28 DOT PITCH NON-INTERLACED 14" SUPER VGA MONITOR

.28 Dot Pitch
Non-Interlaced
1024 X 768

$399

#1871265



COMPAQ 486SL-25MHz

CONTURA AERO 4/25 84MB

SUPER LIGHT NOTEBOOK

486SL 25MHz CPU • 84MB Hard Drive • 4MB RAM expandable to 12MB • Model does not include an integrated 3.5" 1.44 MB diskette drive • EasyPoint Trackball 76-Key Keyboard • Integrated speaker • MS-DOS 6 • Microsoft Windows • WinLink Transfer Utility with cable • Lotus Organizer TabWorks • Online Documentation
3 Year Limited Warranty

$1449

#1890684

COMPAQ 486SL 25MHz

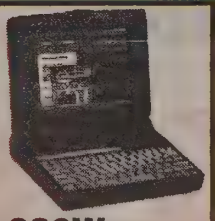
CONTURA AERO 4/25 170MB

SUPER LIGHT NOTEBOOK

486SL 25MHz CPU • 170MB Hard Drive • 4MB RAM expandable to 12MB Model does not include an integrated 3.5" 1.44 MB diskette drive • EasyPoint Trackball 76-Key Keyboard • Integrated speaker • MS-DOS 6 • Microsoft Windows • WinLink Transfer Utility with cable • Lotus Organizer • TabWorks • Online Documentation
3 Year Limited Warranty

$1749

#1890695



COMPAQ 486SL 25MHz

CONTURA 4/25C-209W

209MB COLOR NOTEBOOK

486SL 25MHz CPU • 209MB Hard Drive • 4MB RAM • 3.5" 1.44MB Floppy Drive • 8K Cache • Serial/Parallel • Advanced Passive Matrix Color • MS Windows • MS DOS • Pointing Device

$2399

#1866898

COMPAQ 486SL 25MHz

CONTURA 4/25 CX 209/W

209MB ACTIVE COLOR NOTEBOOK

486SL-25MHz CPU • 4MB RAM • 209MB Hard Drive 3.5" 1.44MB Floppy Drive • Active Matrix Color • MS DOS • MS Windows Easypoint

$3699

#1866876

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

Prices good through May10, 1994

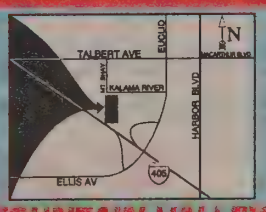
Limit Rights Reserved
Not Responsible For Typographical Errors

VISA

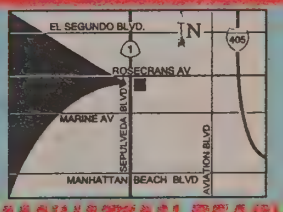
MasterCard

VISA AND MASTERCARD ACCEPTED

STORE HOURS:
MON-FRI
9AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM



FOUNTAIN VALLEY
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX
(714) 378-4444



MANHATTAN BEACH
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX
(310) 364-3700

386DX-40MHz
COMPUTER KIT *BUILD YOUR OWN*

80386DX-40MHz CPU • Motherboard • 1MB RAM
3.5" 1.44MB Floppy Drive
IDE Floppy/Hard Controller
Case • Power Supply • Keyboard
Monitor Not Included
#1842706

$279

486SLC-33MHz
MINI TOWER KIT *BUILD YOUR OWN*

486SLC-33MHz CPU • Motherboard • 1MB RAM
3.5" 1.44MB Floppy Drive
IDE Floppy/Hard Controller
Case • Power Supply • Keyboard
Monitor not included
#1886757

$279

486S-33MHz
VESA LOCAL BUS COMPUTER KIT
BUILD YOUR OWN

Cyrix 486SX-33MHz CPU • Motherboard
1MB RAM • 3.5" 1.44MB Floppy Drive
IDE Floppy/Hard Controller
Case • Power Supply • Keyboard
Monitor not included
#1869949

$379

486SLC2-66MHz
VESA LOCAL BUS MINI TOWER KIT
BUILD YOUR OWN COMPUTER SYSTEM

80486SLC2 66MHz CPU • Motherboard
64K Cache • 1MB RAM
3.5" 1.44MB Floppy Drive
16K Internal Cache
IDE Floppy/Hard Controller • Case
Power Supply • Keyboard • Monitor not included
#1864690

$499

OmniBook 430
486SLC-25MHz
Superportable PC

486SLC-25MHz CPU • 4MB RAM • 105MB Hard Drive
2 PCMCIA Type II Slots • Serial/Parallel • MS DOS • 3lbs
MS Windows • Laplink Remote Access
Pop-Up Mouse
#1896004

HEWLETT PACKARD

$1398

IBM

486SL 25MHz
85MB NOTEBOOK

486SL-25MHz CPU • 4MB RAM
85MB Hard Drive
3.5" 1.44MB Floppy Drive • Serial/Parallel
VGA Output Pointing Device • 4 hr. Battery
Built-in Fax/Modem 5.2lbs.
Model 2168-E35
#1772564

$1599

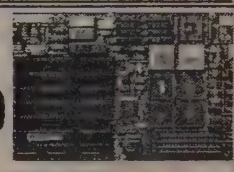
Avanti

486SLC-25MHz 120MB
COLOR NOTEBOOK

486SLC 25MHz CPU • CYRIX SLC Chip with1K Cache
• 4MB RAM • 120MB Hard Drive
3.5" 1.44MB Floppy Drive • MS DOS
MS Windows • Winfax
96/24 Fax/Modem
• Trackball• Color Screen
256 Colors Simultaneously
#1767979

$1999

386DX-40MHz
MOTHERBOARD

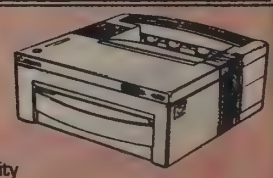


ØK Expandable to 32MB
No Cache
#1810543

$89

Canon

LBP-430
LASER PRINTER



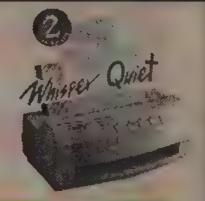
- 300 dpi and Super Fine Toner for Superior Print Quality
- 4 ppm Print Speed • PCL5 Compatible
- 100 Sheet Universal Paper Tray Handles Several Paper Sizes
- 1MB Memory, Upgradeable to 5MB
- Two Year Limited Warranty

#1832460

$599

brother
We're at your side.

HJ-400 DESKTOP
INKJET PRINTER



- 40% more dots per inch than 300 dpi printers
- Windows™ Ready
- 12 resident fonts (Plus Additional TrueType Compatible fonts)
- IBM (Parallel) and Mac (RS-422A) Interfaces
- 100 Page Feeder

#1813410

$298

Charlie Chip Says,
"Your Best Computer Buys Are Always At...

Fry's ELECTRONICS

DATA CORNER

VERBATIM 3.5" DS/HD IBM FORMATTED DISKETTES

Box Of Ten
#1819014

$5.99*

*After $2.50 mail-in rebate. In-store price $8.49.

VERBATIM DC2120 120MB UNFORMATTED DATA CARTRIDGE

Works with DJ 10 & 20, Jumbo 120 & 250, Tracker 120 & 250
#1823022

$10.49*

*After $2.50 mail-in rebate. In-store price $12.99.

1024 X 768 14" SUPER VGA MONITOR

1024 X 768 • .39mm Dot Pitch
Interlaced
1439 #1825563

$199

SVGA 1MB CARD WINDOWS ACCELERATOR

1280 X 1024 maximum resolution
VESA 72Hz
Up to 16.7 million colors
ET4000 #1750485

$89.95

1024 X 768 .28mm DOT PITCH NON-INTERLACED 15" SUPER VGA MONITOR

1024 X 768 • .28 Dot Pitch • Non Interlaced
IS1528N5 #1825611

$338

TOSHIBA DUAL SPEED INTERNAL CD-ROM

SCSI CD-ROM • 200ms Access
330KB/sec Transfer Rate
256K Cache
XM3401B #1785618

$329

MAGNAVOX 640 x 480 14" MAC COLOR MONITOR

.28 Dot Pitch • 640 x 480 • Includes Cable
CM2080 #1748516

$269

Maxtor 245MB 3.5" IDE HARD DRIVE

3.5" Format • 1" Height
15ms Access
MXT-7245A #1759934

$249.95

DATA PORT- 14,400 BPS INTERNAL DATA/FAX MODEM

V.42bis data compression and error correction, you gain effective data throughput of up to 57,600 bps—nearly 24 times faster than 2,400 bps modems—on "real world" phone lines! #1751420

$158

IBM 250MB TAPE BACK-UP

3.5" Form Factor
Runs Standard QIC 80 Software
TD630 #1780174

$169.95

14,400 BPS MODEM/ 9600 BPS FAX FOR THE MACINTOSH® POWERBOOK™

PowerPort/Gold offers the highest performance of any fax/modem available for the Macintosh PowerBook. Using ARA over a telephone line, you can access a file server or files on your desktop computer, check your E-mail, utilize a remote printer, just as if you were at the office and connected to an AppleTalk network. PowerPort/Gold lets you send and receive faxes at 9600 bps. With a data transfer rate of 14,400 bps. #1735613

$259

5.25" EXTERNAL SCSI CASE ENCLOSURE

For SCSI Hard Drive, Tape, and CD-ROM KS-420+P
#1790443

$89.95

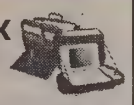
ANTEC

TVIATOR PC TO TV PORTABLE PRESENTATION PARTNER

#1807525

$228

TECHFOLIO I BLACK NOTEBOOK CARRYING CASE



BY SOLIDEX

The TechFolio I offers the convenience of a regular business portfolio, but provides additional padded compartments for mobile phone, notebook computer and other electronic accessories.
Model K-312 #1842670

$28.95

TRIPP LITE TERMINATOR SURGE SUPPRESSOR

Protect your sensitive equipment from devastating AC spikes and line noise. The Terminator's protection is so effective that TrippLite insures your connected equipment against surge damage, even direct lightning strikes, for life! 6 outlets and 6' cord.
UL approved.
#1851018

$29.99

X-10

7 PIECE HOME SECURITY SYSTEM WITH VOICE DIALER

Protects your home and calls for help if there's a break-in. Calls a friend or neighbor so there's no monthly monitoring fee! Installs in minutes. No Tools! No Wiring! DS7000 #1694206

$199.99

UNIVERSAL SYSTEM STAND

Vertical CPU stand frees up valuable desk space. Adjustable stand holds units from 4.5" to 6.25"
#1619403

$5.99

CHINON AMERICA

DUAL SPEED CD-ROM EXTERNAL DRIVE FOR MAC

- Chinon CDA-535 SCSI CD-ROM Drive
- SCSI Cable and Terminator
- Macintosh Device Driver Software
- CD-Audio Play Software
- SelectWare Demo CD
- Power Supply • CD Caddy

CDA-535
#1888597

$449

HS-4/90 2 GIGABYTE 4mm HELICAL-SCAN DATA CARTRIDGE

90 meters DDS approved

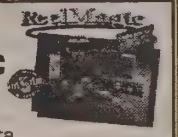
maxell

#1630558

$12.99

SIGMA DESIGNS

REEL MAGIC CD KIT



CD-ROM DRIVE
- Double Speed Data Transfer: 300 KB/sec.
- MPC 2 Compliant Speakers
- 3.5 Watt Magnetically Shielded Cables
- CD-Titles

#1892516

$689

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE

Fry's ELECTRONICS

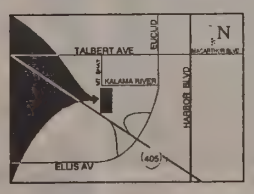
Limit Rights Reserved
Not Responsible For Typographical Errors

Prices good thru May 10, 1994

STORE HOURS
MON - FRI
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

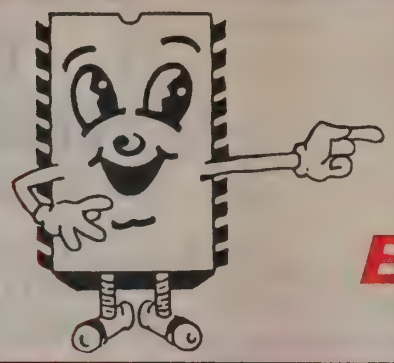
VISA
MasterCard
VISA and MasterCard Accepted

FOUNTAIN VALLEY
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX
(714) 378-4444



MANHATTAN BEACH
3600 Sepulveda Blvd.
(310) 364-3797
CORP. P.O. FAX
(310) 364-3700

Fry's ELECTRONICS



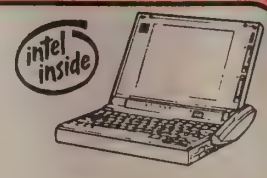
SEE OVER 10,000 ELECTRONIC ITEMS AT LOW, LOW PRICES!

LEADING EDGE
486SX-33MHz
170MB SVGA VESA LOCAL BUS SYSTEM

80486SX-33MHz CPU • VESA Local Bus
4MB RAM Expandable To 32MB • 170MB Hard Drive
3.5" 1.44MB Floppy Drive • Mouse Six Software Titles
2 Serial/1Parallel • Monitor Not Included
#1885723

$999* *After $50 Mail-In Rebate. In-Store Price $1049

IBM® PS/1®
486SL 25MHz
128MB NOTEBOOK



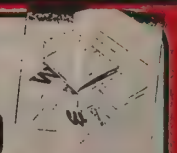
486SL-25MHz CPU • 4MB RAM • 3.5" 1.44MB Floppy Drive • 128MB Hard Drive
Serial/Parallel /VGA Output • Pointing Device • 5 hr. Battery • Built-in Fax/Modem
5.2lbs.
Model 2168-M40
#1772575

IBM

*IBM and Personal System/1 are registered trademarks of International Business Machines Corporation

$1899

HEWLETT PACKARD
Authorized Dealer

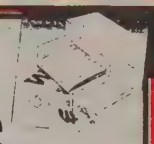


DeskJet 520 Inkjet Printer

Clear, sharp, professional-quality black output with 600 x 300 dpi black printing, HP's Resolution Enhancement technology for smooth, crisp characters, fast text printing at up to 3 ppm, 256 levels of grayscale, energy efficient, and has a three year limited warranty.
#1888519

CALL FOR BEST PRICE

HEWLETT PACKARD
Authorized Dealer



DeskJet 560C Color Inkjet Printer

Outstanding print quality in black and color. This clear, sharp, professional-quality with 600 x 300 dpi black output has HP's Resolution Enhancement technology for smooth, crisp characters, fast text printing at up to 3 ppm for black and 4 mpp for color, 256 levels of grayscale, is energy efficient, and has a three year limited warranty.
#1888542

$549.99

HEWLETT PACKARD
Authorized Dealer

LaserJet 4P

- True 600 x 600 dpi printing for four times the resolution of conventional 300 dpi printers
- HP Microfine toner and Resolution Enhancement Technology for smoother, sharper graphics
- Enhanced HP PCL 5 for seamless compatibility with the HP LaserJet 4 printer
- 45 built-in scalable typefaces
- 2MB standard memory, expandable to 26MB

#1842050

$939.88

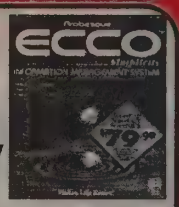
SIIG, Inc.

TV GAMER PLUS
NTSC/TV CONVERTER

PLAY COMPUTER GAMES ON TV, VIDEO PRESENTATIONS AND MORE
#1890972

$179.95

Arabesque ECCO SIMPLICITY

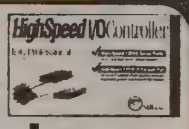


Welcome to the world of ECCO Simplicity, the easy, yet powerful way to manage your calendar, PhoneBook, Contact management, To-Do's and Lists. ECCO is the first Personal Information Manager that fully utilizes the friendly Windows environment to produce a remarklably integrated system that is easy to use. The benefit to you-using ECCO Simplicity makes your life easiier.

$59.95

IBM
#1867198

SIIG, Inc.

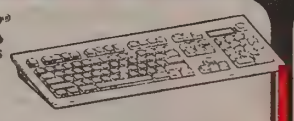


High-Speed I/O IDE Controller
16550 Serial w/ 2.88MB FDD w/IDE Interface

HI-Speed16550 Serial
Hi-Speed EPP/ECP Parallel
IDE Interface up to 2.88MB Floppy Controller
Game Port
#1884423

$79.95

Interex® Computer Products



105 KEYBOARD Compatible Mac Keyboard

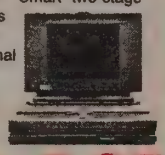
with Wave Design
#1869215

$99.99

TECHNOGGIN
POWERPLATE 3X

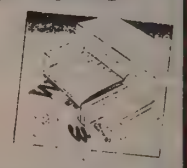
Provides up to three times the battery life of a PowerBook battery alone.

Integrated design can attach to a PowerBook
Indicators show charging status • "Smart" two-stage charging • Replaceable batteries last approximately 800 - 1400 charges • PowerPlate and internal PowerBook battery are simultaneously charged. using your PowerBook AC adapter
#1893908



$239.95

DeskWriter 520 Inkjet Printer for Mac



Clear, sharp, professional-quality black output with 600 x 300 dpi black printing, HP's Resolution Enhancement technology for smooth, crisp characters, fast text printing at up to 3 ppm, 256 levels of grayscale, energy efficient, and has a three year limited warranty.
#1892457

HEWLETT PACKARD
Authorized Dealer

$276.89

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

Prices good through May 10, 1994

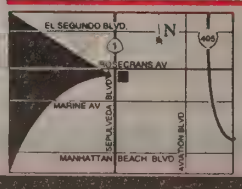
Limit Rights Reserved
Not Responsible For Typographical Errors

STORE HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

FOUNTAIN VALLEY

10800 Kalama River Ave.
(714) 378-4400 CORP. P.O. FAX (714) 378-4444



MANHATTAN BEACH

3600 Sepulveda Blvd.
(310) 364-FRYS (3797) CORP. P.O. FAX (310) 364-3700

Fry's ELECTRONICS

ONE STOP SHOPPING FOR THE HI-TECH PROFESSIONAL!

486SLC2 50MHz MINI TOWER KIT BUILD YOUR OWN

80486SLC2-50MHz CPU • Motherboard
1MB RAM • 3.5" 1.44MB Floppy Drive
IDE Floppy/Hard Controller • Case • Power Supply • Keyboard
#1906075

$329

SONY 3.5" 1.44MB FLOPPY DRIVE

MOUNTING SOLD SEPARATELY
#1850648

$39.95

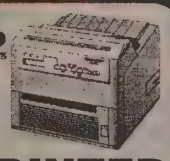
Panasonic Office Automation KX-P1150 DOT MATRIX PRINTER

- 240cps draft print speed
- 4K buffer capacity frees up the computer
- Windows 3.1 driver included
- 2 year limited warranty
- 7 Resident fonts

#1839283

$149.99

SHARP JX-9400 LASER PRINTER



6PPM • 300 DPI • 512K Ram Expandable to 4.5MB
250 Sheet Tray • 5000 Page Toner Supply Yield
Printer Emulation: HPPCL4, IBM Pro-Printer, IBM Graphics Printer, Epson FX-80, Diablo 630
Parallel Interface • 1 Font Card slot
One Year Warranty
Sharp JX-9400
#1813498

$498

LaserJet 4L

- 26 built-in scalable typefaces let you shrink and enlarge type to thousands of sizes.
- 300 DPI Laser printing with HP Resolution Enhancement Technology and microfine toner for smooth, sharp text and graphics.
- 1MB standard memory with Memory Enhancement Technology effectively doubles your printer memory.

#1786963

HEWLETT PACKARD Authorized Dealer

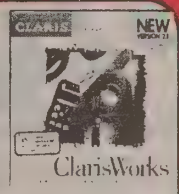
$629

QUANTUM 1.05 GIGABYTE SCSI HARD DRIVE

1.05 GB SCSI, 10MSEC, 1" HT, 5 Years Warranty
#1899052

$799

CLARIS WORKS 2.1 FOR MAC



The bestselling Macintosh integrated product just got better!

- Fits on any Mac! From The Mac Classic to the top of the line Quadra.
- Share files with Macintosh, Windows, or DOS
- Create your own eye-catching graphics with Claris' full featured graphic editor.

CLARIS

MAC
#1902462

$199.95

COLORADO MEMORY SYSTEMS INC. 1 GIGABYTE INTERNAL SCSI BACK-UP DRIVE

12MB/MIN • NOVELL/LANTA
Uses DC-6525
#1891319

$699.95

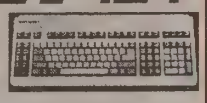
DOUBLE FUSION LX MULTIMEDIA KIT

Pro AudioSpectrum 16 Sound Card
• 16-bit stereo Recording/Playback at 44KHz
Double Speed CD-ROM Drive
• 300KB/sec transfer rate
• Fast 320ms Access Time • 64K Buffer
• Multi-session Photo CD compatible
Labtec CS-550 Speakers
Quickstart Installation Software
Exciting CD-ROM Software
#1888368

MEDIA VISION

$299.99

Maxi Switch ProKEY 124 124-KEY KEYBOARD



ELIMINATES MANY REPETITIVE MOTIONS

Fully Programmable, Remapable and Versatile
#1756931

$79.99

IBM TRUE COLOR SCANNER

- True Color (16 Million)
- 8.5" Scan Width
- 600 dpi Resolution
- 2.5ms/line Scanning Speed
- Image Software Included

SC591
#1880876

Easy OPTIONS by IBM

$499

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

Prices good through May 10, 1994

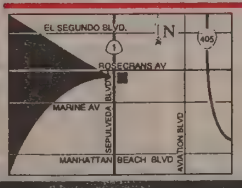
Limit Rights Reserved
Not Responsible For Typographical Errors

STORE HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

FOUNTAIN VALLEY

10800 Kalama River Ave.
(714) 378-4400 CORP. P.O. FAX (714) 378-4444



MANHATTAN BEACH

3600 Sepulveda Blvd.
(310) 364-FRYS (3797) CORP. P.O. FAX (310) 364-3700

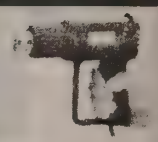
YOUR BEST COMPONENTS AND ACCESSORIES BUYS ARE ALWAYS AT FRY'S!

HAKKO 470 DESOLDERING TOOL

The Hakko 470 is designed for great thermal supply and suction power- as well as provide protection against electrostatic discharges and electrical surges-making them ideal tools for safety and efficiently desoldering multi-layer boards: #1852709

$569.95

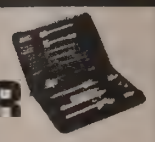
HEAT GUN



An economical, lightweight, multi-use heat gun for heat shrink tubing. Features:
- 2 Heat Settings - 500ºF and 1,000ºF
- 3 Position Slide Switch • Built-In Hand Guard
- 3-Wire Grounded Cordset
- UL Listed • Thermoplastic Case
- 1 Year Limited Warranty • 120 Volts AC
- 1200 Watts Max. #1790270

$33.95

QVS COMPUTER SERVICE KIT



Contains an assortment of specialty tools for computer service. Includes chip extractor, assembly tweezers, three clawparts retriever, four screwdrivers (two, slotted, two Phillips), two nut drivers and a torx screwdriver neatly stored in a zippered vinyl carrying case.

$11.95

CA215L
#1780794

AIR BLAST PRESSURIZED DUSTER

RITE-OFF
E626-6oz.
#1719655

CFC FREE!

$2.99

AERVOE CONTACT CLEANER

Use to clean and remove dirt from electrical/electronic components, circuit boards, switches, timers and motors. Evaporates quickly without oxidizing or leaving a cross-circuiting residue. High dielectric strength.
AP-415 #1874970

$4.49

platt TROUBLE SHOOTER TOOL CASE

Black cordura with two exterior meter pockets and one document pocket. Interior has 29 sewn tool pockets and one meter pouch.
13" x 10" x 2". 660ZT-BLK #1790199

$59.99

KLEAR SCREEN COMPUTER SCREEN CLEANER

- Convenient Packets
- Non-toxic • Alcohol free
- Ammonia free

$3.99

6 PACK
#1809778

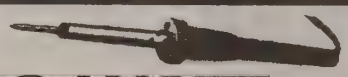
50 DRAWER STORAGE CABINET

See-thru drawers
Stackable frames
Recessed tray top • Pedestal base
Keyhold hanging slots
Gray pebble grain finish
Model 10-350
#1541399

AKRO-MILS

$9.99

30 WATT SOLDERING IRON



#1842968

AR

$3.99

AERVOE MicroTorch & Solder Kit

An instant ignition adjustable flame torch powered by butane fuel with its own 1.5 fluid oz. storage tank. Hand-held, free-standing design for workshop, daily and recreational use. Solder attachments makes this torch a 5-in-1 multi-purpose tool.

$39.99

1250
#1875029

RAMSEY ELECTRONIC KITS STEREO FM TRANSMITTER

That's right, we said stereo! Just connect a cassette deck, CD player or mixer panel to the FM-10's line level inputs and you're on-the-air with a school, dorm, camp, home or neighborhood FM station. Do it yourself soldering/assembly and education. Come see our selection of other kits too.

$34.95

FM-10
#1742989

MicroApps PERMANENT POWER PACK™

PREVENT PC FAILURE DUE TO A DEAD BATTERY. Your PC will fail to boot up unless it contains the Patented Permanent Power Pack from MicroApps. Virtually all other PCs have a dying battery which causes real time Clock Failure and Loss of the System Configuration File. Thus, your PC will unpredictably fail to boot every few years. The lifetime guaranteed Permanent Power Pack eliminates the clock battery in IBM PC/AT and most compatibles. Never replace your PC battery again. IC controlled power management system makes your PC more reliable and carries a lifetime warranty.

$32.95

Model PPP-001
#1660638

FOCUS 140 WATT CONTINUOUS DC TO AC INVERTER

12vdc to 110vac • Low Battery Alarm
Electronic Circuit Protection
High Surge Current Capacity

$49.99

PC140
#1732698

FOREIGN TRAVEL TRANSFORMER REVERSIBLE UP TO 1000 WATTS!

Step-Up/Step-Down Foreign Voltage Transformer. Constant Duty Transformers/Reversible. 110VAC/220VAC or 220VAC/110VAC. Ideal for travel or for using oversees products here. Available in 50W, 100W, 200W, 300W, 500W, 1000W

$18.99

250-1000X50 watt
#1662445

APPLETALK NETWORK KIT

Provides capability of building a standard appletalk network for your MAC

$11.99

Model MF-037
#1640218 DIN 8

NEW MAC CABLE

Attention Macintosh Users! The Intellisoft's Intelliview Adapter Connects A Variety of Monitors To The On-Board Video Of Apple's Latest Macs.
- Works with hundreds of inexpensive PC multi-frequency monitors to mimic all of Apple's monitors up to 21" at 1152 x 870.
- Allows easy switching between various resolutions to suit changing needs.

4691V #1800584

$27.99

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE

FRY'S ELECTRONICS

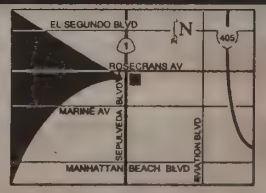
Prices good thru May 10, 1994

Limit Rights Reserved Not Responsible For Typographical Errors

STORE HOURS
MON - FRI 8AM - 9PM
SATURDAY 9AM - 8PM
SUNDAY 9AM - 7PM

VISA and MasterCard Accepted

FOUNTAIN VALLEY
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



MANHATTAN BEACH
3600 Sepulveda Blvd.
(310) 364-3797
CORP. P.O. FAX (310) 364-3700

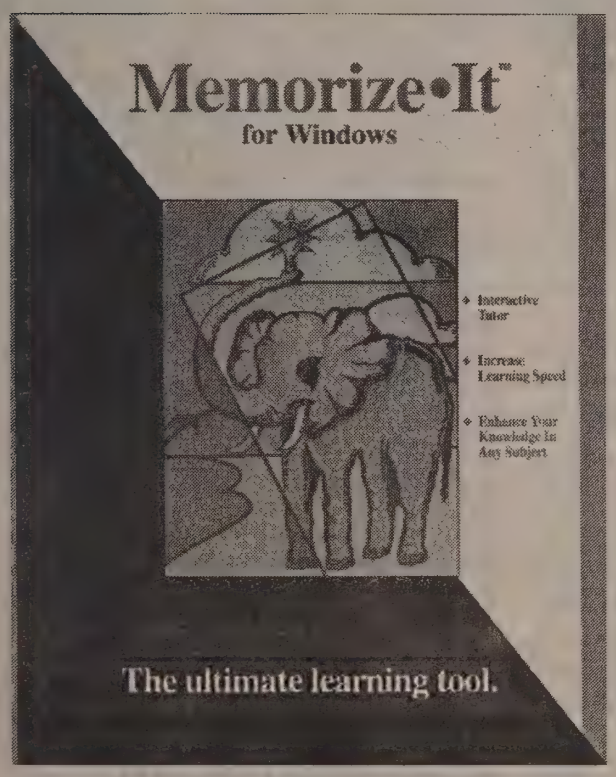
PRODUCT SPOTLIGHT

New Products

PC Software

MEMORIZE•IT

Memorize•It is a multimedia flashcard application that allows you to create your own stacks of flashcards incorporating text, sound, pictures, drawings, and even video. Using several testing methods—multiple choice, true/false, honor system—it can be used for any subject from preschool to medical school. Cards can be easily moved between stacks or copied to build a new stock. They can be printed front and back on four styles of Avery card stock paper. Memorize•It runs on Windows 3.1; a Macintosh version is also available. Side Eight offers picture scanning and stack creation for specialized topics. ($49) Side Eight, Inc., PO Box 5004, Garden Grove, CA 92645-5004. (714)952-4114.



XEROX TEXTBRIDGE 2.0 FOR WINDOWS

TextBridge 2.0 for Windows, featuring OCR technology codeveloped with Xerox PARC, works with scanners and fax modems to provide users with a powerful solution for integrating paper-based information—including faxes and other degraded documents—into Windows applications. New features include an Application Server, which seamlessly integrates TextBridge into word processing, email, or spreadsheet applications on the file menu, allowing access to OCR technology from other Windows applications; OCR Print Driver that sends page images directly from fax modems and printing applications to TextBridge; a Word Verifier that allows users to view, confirm, and correct words while recognition is in process; and Multiple TIFF File Processing to quickly process large batches of TIFF files as a single document and handle

UPDATES

✣ **Avantos Performance Systems** is shipping **ManagePro 2.0 for Macintosh**, an easy-to-use tool for helping managers and workteams stay on top of goals and deadlines, manage people more effectively, and stay organized. Avantos Performance Systems, Inc., 5900 Hollis St., Suite C, Emeryville, CA 94608. 1-800-282-6867.

✣ **ClarisWorks 2.0 for Macintosh** is now available in a special **English/Spanish bundle** for the Education market. The bundle consists of both English and Spanish versions of the product, offering identical features and user interfaces. Claris Corp., Claris Education Sales, 1-800-747-7483.

✣ **Claris** announced it has ceased development of the **Claris Resolve** spreadsheet application and will not sell it after March 31, 1994. Claris will continue to provide technical support for registered Resolve users through March 31, 1995. Claris is offering current Resolve users **ClarisWorks 2.1** for a special price of $29 in the US through September 30, 1994. Claris Corp., 5201 Patrick Henry Dr., Box 58168, Santa Clara, CA 95052. 1-800-544-8554.

✣ **Davidson & Associates** released the DOS version of **Spell It 3**, a major upgrade to Spell It Plus. Upgrades for users of any previous Spell It version are available from Davidson for $19.95 plus shipping and handling and applicable sales tax. Davidson & Associates, Inc., 19840 Pioneer Ave., Torrance, CA 90503. (310)793-0600.

✣ **Horizons Technology** introduced **LANshadow 4.0** mirroring software, featuring a new Windows user interface, a price tag below $1000, and several key enhancements designed to make the program easy to use. Horizons Technology, Inc., 3990 Ruffin Rd., San Diego, CA 92123. 1-800-828-3808.

✣ **Inline Software** shipped an upgrade to **Redux Deluxe**, its backup program for the Macintosh. In addition, **StuffIt Deluxe** is being bundled with Redux Deluxe 2.5. Inline Software, Inc., 308 Main St., Lakeville, CT 06039. 1-800-453-7671.

✣ **Logitech** reduced the pricing on its high-performance **MouseMan PC Corded** line by more than 50%. The MouseMan corded right- and left-handed device has been reduced to $49.95. MouseMan Bus has been reduced to $79.95, and the MouseMan Cordless is now $109.95. Logitech, Inc., 6505 Kaiser Dr., Fremont, CA 94555. (510)795-8500.

✣ **Microsoft Corp.** released **Microsoft Money 3.0**, a new version of its personal finance software for Windows, with technology that enables the remote delivery of financial services. Users of Microsoft Money 2.0, Excel, and Works can get $5 off the suggested retail price with an in-box rebate coupon. Microsoft Corp., One Microsoft Way, Redmond, WA 98052. (206)882-8080.

✣ **Q/Media Software** introduced **Q/Media for Windows Release 2.0**, an affordable, easy-to-use, interactive multimedia authoring tool. Q/Media Software Corp., 312 E. 5th Ave., Vancouver, B.C., Canada V5T 1H4. (604)879-1190.

✣ **Sun Microsystems** announced that it is bundling **Lotus Notes** at no charge with every SPARCserver shipped in the US through June 30, 1994. Customers receive a coupon for Lotus Notes software plus six licenses. Sun Microsystems Computer Corp., 2550 Garcia Ave., Mountain View, CA 94043. 1-800-346-1305.

✣ **2010 Software Corp.** introduced **Sherlock 2.0**, an enhanced version of its file finding management software for Windows. 2010 Software Corp., 1-800-952-2314.

TOSHIBA OKIDATA • PACKARD BELL • AT&T • COMPAQ • NEC • ZENITH • LIBREX • TWINHEAD • MAXTOR • AST • IBM • SHARP • EPSON • CONNER •

MicroSource is your source

(909) 592-2423
(909) 592-0660 fax

SPECIAL SALE

386 Complete System with 14" Monitor $479

486 Complete System with 14" Monitor $539

MULTIMEDIA

SONY KIT
SONY UPGRADE KIT, DOUBLE SPEED CD-ROM, 16-BIT STEREO CARD, 2 SPEAKERS, 4 TITLES & AUDIO $269

MITSUMI KIT
CD-ROM MITSUMI DOUBLE SPEED, 16-BIT SOUND CARD MEDIAVISION CHIP SET, JOY STICK, 4 CD TITLES, 4x4 WATT SPEAKER SET $269

CD-ROM DRIVES
MITSUMI DOUBLE SPEED w/AT CARD $149
PANASONIC 562 $179
NEC SCSI $279
TOSHIBA 3401B $299
SONY DOUBLE SPEED 33A $169

CREATIVE LABS
SOUND BLASTER DELUXE $69
SOUND BLASTER PRO DELUXE $89
SOUND BLASTER 16 BIT BASIC $119
SOUND BLASTER 16-BIT ASP $169
SOUND BLASTER 16-SCSI-II $179
SOUND BLASTER 16-SCSI-II ASP $205
SPEAKERS CALL

OUR LOWEST PRICE SYSTEMS

486DX2-66 INTEL	$1249
486DX-50	$1199
486DX-33	$1089
486DLC-40	$899
PENTIUM	CALL

EVERY SYSTEM INCLUDES:
256K CACHE, 4MB RAM, 1.2 & 1.44MB FLOPPY, 130MB HDD, IDE w/2S, 1P, 1G, SVGA COLOR MONITOR (.28 dpi, NI), KEYBOARD, MINI TOWER.
WE DO ALL UPGRADES

HARD DRIVES

WESTERN DIGITAL		CONNER	
200MB	$199	210MB	$195
240MB	$229	340MB	$279
340MB	$279	420MB	$289
540MB	$399	540MB	$429
MAXTOR		QUANTUM	
170MB	$179	270MB	$219
245MB	$224	340MB	$259
345MB	$265	540MB SCSI	$415
540MB	$425	1.08GB	$179

NOTEBOOKS

TOSHIBA

T-1910, 486SX-33, 4/120MB	$1479
T-1950, 486DX2-40, 4/120MB	$1799
T-4600C, 486DX-33, 120MB	$3919
IBM, TRAC, AST, DIGITAL, INEX	CALL

MOTHERBOARDS

386SX-40MHz w/CPU	$69
386DX-40MHz w/CPU, 128K CACHE	$85
486DX-40MHz w/CPU, 128K CACHE	$329
486DX2-50MHz w/CPU, 256K CACHE VLB	$379
486DX2-66 MHz w/CPU, 256K CACHE VLB	$499
486DLC-40 w/CPU, MATH CO., 256K CACHE	$215
486SLC2-66 IBM w/CPU, MATH CO.	$249

MONITORS

14" MONO VGA	$99
14" SVGA .39	$185
14" SVGA .28 NI	$209
15" SVGA .28 NI	$339
17" SVGA .28 NI	$609

FAX/MODEM

2400 MODEM	$28
96/24 FAX/MODEM	$44
14400 FAX/MODEM	$126
14400 FAX/MODEM	$139

SIMM MEMORY

1x2 70ns 1MB	$33
1x3 70ns 1MB	$36

KEYBOARDS

GENERIC 101K	$13
KEYTRONIC 101K	$16
BTC 101K	$16
BLACK KEYBOARD 101K	$23
MITSUMI 101K	$25
FOCUS 102K	$29
FOCUS 2001, 101K w/DUST COVER	$35
FOCUS 103K w/TRACK BALL	$39
FOCUS 111K w/CAL	$39
FOCUS 130K PROG. KB w/CAL	$52

OKIDATA PRINTERS

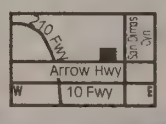
400E/410E 4PPM	$475/615
520/521	$379/495
590/591	$429/559
810/830 8PPM	$855/999
850 8PPM	$1139

HEWLETT PACKARD PRINTERS

DESKJET 310 COLOR PORTABLE	$310
DESKWRITER	$280
DESKJET 500/500C	$275/380
DESKJET 560/1200C	$500/1320
DESKWRITER 550C	$559

403 E. ARROW HWY. STE. 308
SAN DIMAS, CA 91773
HOURS M-F 9-5, SAT. 9-2

ALL SYSTEMS COME WITH A 1/YR WARRANTY
EXT. SUPPORT & SERVICE AVAILABLE
PRICES AND AVAILABILITY SUBJECT TO CHANGE W/O NOTICE



PRODUCT SPOTLIGHT

multiple-page TIFF files received from fax applications. ($99) Xerox Imaging Systems, Inc., 9 Centennial Dr., Peabody, MA 01960. (508)977-2000.

Books

THE INTERNET CONNECTION

The Internet Connection: System Connectivity and Configuration, by John S. Quarterman and Smoot Carl-Mitchell, is the reference guide that explains how to connect to the Internet, step by step, from finding a connection through registering a domain and a network number, through configuring your TCP/IP protocols, to running your own domain server and setting up your mail and news systems. The book includes brief overviews of Internet services and protocols, and it briefly describes what the Internet is and is not, and how it differs from other networks. However, the authors assume that the reader already knows about those other networks, knows about Internet services, and already wants to connect to the Internet. This book shows how to do that. ($29.95) Addison-Wesley Publishing Co., Reading, MA 01687. (617)944-3700.

SIMCITY 2000: POWER, POLITICS, AND PLANNING

SimCity has already stepped into the twenty-first century where power, politics, and planning still combine to make a city thrive or decay—and its leaders have been playing with the reality of tomorrow without a solid guide. *SimCity 2000: Power, Politics, and Planning*, by Nick Dargahi is the guide that will allow today's SimMayors to be ruling their dream cities as quickly, easily, and painlessly as possible. The book covers Macintosh and DOS versions of SimCity 2000—including tips for running the DOS 1.1 and OS/2 versions of the game in Windows. ($19.95) Prima Communications, Inc., PO Box 1260, Rocklin, CA 94577-1260. (916)786-0426.

PC Hardware

MICRO COMPUTER TWINFACE

Designed to meet the needs of presentation, CAD/CAM, publishing, and graphic design professionals, Twinface enables simultaneous use of dual monitors with a single PC. Combined with the microCrystal display interfaces, Twinface operates two displays in tandem as a single Windows desktop. Users can adjust the resolution of each display independently to accommodate the need to display different images and applications simultaneously. (Suggested list price for the Twinface Basic Bundle with one microCrystal 8S and one microCrystal 16Si is $599; the Power Bundle with two microCrystal 16Si display interfaces is $749; the Masterpiece Bundle includes two microCrystal 32S display interfaces and Altimira Composer for $1699) micro Computer Products, Inc., 1-800-249-MIRO.

ALARIS ENERGYSMARTPC

The new EnergySmartPC line of low-cost, Energy Star-compliant PCs features the clock-doubled IBM 486 SLC2 microprocessor, integrated VESA Local Bus Windows accelerator, and integrated VL-bus IDE controller for exceptional overall system performance. A key component of this system is Alaris's EnergySmart power management software, which enables the system to operate as low as 28W during active use and at 25W during sleep cycles. Each system includes a 50 or 66MHz IBM 486 SLC2 CPU, on-board floating point unit, 4MB of RAM, one parallel and two serial ports, one 3.5" floppy disk drive, 101-key extended keyboard, MS-DOS 6.2, and Windows for Workgroups 3.11. (EnergySmartPC SLC2 50 carries a suggested list price of $945) Alaris, Inc., 46704 Fremont Blvd., Fremont, CA 94538. (510)770-5700.

See The Power!

VESA WIN

4Mb Ram & 256K Cache
Genoa 8500 VLB VGA w/1MB
32 Bit VLB IDE w/2S, 1P
210MB IDE Hard Drive
1.2 & 1.44MB Drives
14" 1024NI SVGA Monitor, .28mm
Mini-Tower Case
101 Keyboard
Hi-Res Mouse

AMD 486DX-40 ..... $1195
AMD 486DX2-50 ..... $1205
AMD 486DX2-66 ..... $1345
Upgrade to 15" NI Full Screen Monitor ..... Add 100
Upgrade to 420 MB IDE Drive ... add 100

486 PCI SYSTEM

486 PCI MotherBoard w/256K
Upgradeable to 486DX4-100MHz
4MB RAM
Genoa Phantom PCI VGA w/2MB
32 Bit PCI Controller
420MB IDE Hard Drive
1.2 & 1.44MB Drives
CTX 15" Full Screen Monitor
Mid-Tower Case
101 Keyboard
Hi-Res Mouse

AMD 486DX-40 ..... $1575
AMD 486DX2-50 ..... $1585
486DX2-66 ..... $1695
486DX4-100 ..... Call
Upgrade to Diamond Stealth 64 PCI Video Board w/2MB VRam ..... add 210
Up to DC690 PCI IDE Caching w/512K ..... add 190

MEDIA MAGIC

Pentium Technology Ready
8MB Ram & 256K Cache
Diamond SpeedStar Pro w/1MB
32 Bit VESA IDE w/2S, 1P, 1G
420MB IDE Hard Drive
Mitsumi FX001 2X CD-ROM
1.44 MB Drive
Diamond Sonic 16-bit Sound Card
Stereo Speaker
CTX 15" Full Screen Monitor
Mid-Tower Case
MaxiSwitch 101 Keyboard
Microsoft Mouse

486DX-33 ..... $1995
AMD 486DX-40 ..... $1985
486DX2-66 ..... $2175
Upgrade to SoundBlaster 16 SCSI & NEC 3X CD-Rom ..... add 330

PENTIUM PC

Intel Pentium CPU
8MB Ram & 256K Cache
3 PCI/4 ISA Slots
Genoa Phantom PCI w/ 2MB Ram
540MB IDE Hard Drive
Mitsumi FX001 2X CD ROM
1.44 MB Drive
CTX 15" Full Screen Monitor
Mid-Tower Case
MaxiSwitch 101 Keyboard
Microsoft Mouse

Pentium 60 MHz $2645
Pentium 66 MHz $2885
Pentium 90 MHz ..... Call
Upgrade to 16 Mb ..... add 290
Upgrade to Matrox PCI 4MB VRam ... add 580
Upgrade to 540MB SCSI Drive & Adaptec 2940 PCI SCSI ..... add 220

SMARTLINK FAX/MODEM

SmartLink 2400BS int. $25
SmartLink 9624BS int. $38
SmartLink 9624BC int w.Voice Mail $65
SmartLink 1414BAV int. w/Kit $99
SmartLink 1414AV ext. w/Kit $129
SmartLink 1414PAV Pocket w/Kit $189
SmartLink 1914BAT int. 14.4K/fax & 19.2/modem $155
SmartLink 1914AT ext. 14.4/fax & 19.2/modem $185

*all SmartLink kits include WINFAX Lite, DOSFAX Lite, Comit for Windows Lite, & Comit for DOS Lite

Conner 340MB
IDE Hard Drive • 13ms
$265

Conner 420MB
IDE Hard Drive • 14ms
$299

Conner 540MB
IDE Hard Drive • 12ms
$389

ViewSonic 17
17" .27mm
1280x1024/76Hz • 1600x1280 NI
$898

ViewSonic 15
15" .28mm
1024x768/76Hz • 1280x1024 NI
$442

MAG 15F
15" .28mm 1280x1024 NI
$465

NEC 3X CDR510
3 Speed SCSI CD ROM
195ms* 450K Tran. Rate
$395

Colorado 250
250MB Tape Backup
DOS & Windows Software
$159

Hi Speed I/O
16C552 Chip
$38

Matrox II PCI/VLB
2MB VRam Video Board • 90 Million WinMark
1280x1024/76Hz 256 Color
Virtual Desktop • QCDC
Real Time CAD Acceleration
$455

Matrox II PCI+
4 Mb VRam Video Board
Same as above But 1600 x 1280 Res.
$695

387DX40 Math Co
$45

Controllers

DC600 ISA IDE Caching w/512K $125
DC620 EISA IDE Caching w/512K $175
DC680 VESA IDE Caching w/512K $165
DC690 PCI IDE Caching w/512K $235
DC800 ISA SCSI II Caching w/512K $245
DC820 EISA SCSI II Caching w/512K $415
DC880 VESA SCSI II Caching w/512K $405
ADAPTEC 1542CF SCSI Ctrl w/sw $265
ADAPTEC 1542C SCSI Ctrl bare $205
ADAPTEC 2742T EISA bare $295
ADAPTEC 2742 EISA w/kit $345
ADAPTEC 2842 VLK VLB w/sw $305
ADAPTEC 2940 PCI $219

Monitors

MAG 15F .28mm 1280x1024NI $465
MAG 17F .26mm 1600x1024NI $880
ViewSonic15 15" .28mm 1280x1024NI $442
ViewSonic 17G 17" .28mm 1280x1024NI $785
ViewSonic17 17" .27mm 1600x1280NI $898
ViewSonic21 21" .25mm 1600x1280NI $1728
CTX 1451 14" NI Full Screen .28mm $277
CTX 1461LR 14" 1024x768/72Hz .28mm $299
CTX 1561LR 15" NI .28mm $358
CTX 1760LR 17" 1280NI .28mm $745

CD ROM

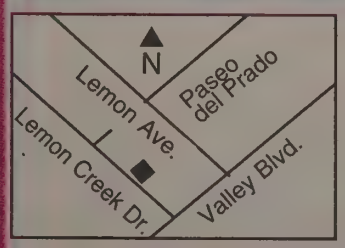
NEC CDR-510 3X Speed 195ms SCSI $405
Mitsumi 2X Speed 250ms $179
Sony 33A 2X 300ms $185
Toshiba 3401B SCSI 200ms $375
Toshiba 3401E SCSI External $495
Panasonic CR-562 2X Speed 290ms $193

Video Boards

Diamond SpeedStar Pro ISA w/1MB $115
Diamond SpeedStar Pro VESA w/1MB $115
Diamond Stealth 24 VESA w/ 1MB $159
Diamond Stealth Pro VESA w/2MB VRam $319
Diamond Stealth 32 PCI w/2MB $265
Diamond Viper VESA w/2MB VRam $395
Diamond Viper PCI w/2MB VRam $445
Genoa 8500VL 1MB Upgradeable $109
Genoa Phantom 32i VESA w/2MB $205
Genoa Phantom 32p PCI w/2MB $235
Matrox MGA II VESA w/2MB VRam $445
Matrox MGA II PCI w/2MB VRam $445
Matrox MGA II PCI w/2MB VRam Upgradable $495

Sound Boards

SoundBlaster 16 MCD $179
SoundBlaster 16 MCD ASP $199
SoundBlaster 16 SCSI $199
SoundBlaster 16 SCSI ASP $224



Business Hours:

Monday-Friday: 10 am-7 pm
Saturday: 10 am-5 pm

Prices subject to change without notice. Quantity limited. All sale items are based on COD, Cash or Cashiers Check. All Brand, product or company names are trademarks or registered trademarks of their respective holders.

AIC Computer, Inc.

398 S. Lemon Creek Dr. #A
(909) 598-5818
Fax: (909) 598-7668
We Have Moved

NEW TECHNOLOGIES
COMPUTER APPLICATIONS

SONY Trinitron®

Authorized Dealer

GDM-17se

- 17" Multiscan® Trinitron® color graphic display
- .25mm Super Fine Pitch™ Aperture Grille
- Maximum resolution: 1280 x 1024
- Horizontal frequency scan range: 31.5 to 82 kHz
- Vertical frequency scan range: 50 to 120 Hz
- Mac Compatible

$ 1095*

GDM-2036S

- 20" Multiscan® Trinitron® color graphic display
- .30mm Super Fine Pitch™ Aperture Grille
- Maximum resolution: 1280 x 1024 (non-interlaced)
- Sony Display Memory System
- Horizontal frequency scan range: 30 to 71 kHz
- Vertical frequency scan range: 50 to 120 Hz
- Mac Compatible

$ 1795*

GDM-2038

- 20" Multiscan® Trinitron® color graphic display
- .30mm Super Fine Pitch™ Aperture Grille
- Maximum resolution: 1280 x 1024 (non-interlaced)
- Sony Display Memory System
- Dynamic Focus System
- Horizontal frequency scan range: 28 to 85 kHz
- Vertical frequency scan range: 50 to 160 Hz
- Mac Compatible

$ 1895*

Intel Pentium™ WinProfessional

Intel Pentium™ Processor
8MB RAM
256K Cache
1.44 Floppy Drive
420MB IDE Hard Drive
PCI Genoa Phantom
32-bit Graphics Card w/2MB
2 Serial/ 1 Parallel/ 1 Game
Medium Tower Case
Enhanced 101 Keyboard
High Resolution Mouse
CPU Cooling Fan

intel inside pentium PROCESSOR

Pentium P5-60 MHz $ 2195
Pentium P5-66Mhz 2295

With Purchase of Monitor.

Intel486™DX2-66 Vesa Local Bus WinMax

Intel486™ microprocessor
4MB RAM
1.44 Floppy Drive
420MB IDE Hard Drive
32-bit SVGA Graphics Card w/1MB
2 Serial/ 1 Parallel/ 1 Game
Enhanced 101 Keyboard
Hi-Res Mouse

intel inside

$ 1195

With Purchase of Monitor.

TERMS AND CONDITIONS

Corporate, Government, & School POs Welcome
Prices Reflect 3% Cash Discount
California Shipping Address Must Add Appropriate Tax
Prices Subject To Change Without Notice - All Sales Final
COD Orders Accepted - Subject to Credit Approval

* Prices based with purchase of system

Sony, Trinitron, Multiscan, and Super Fine Pitch are trademarks of Sony.
The Intel Inside and Pentium Processor Logos are trademarks of Intel Corporation.

PASADENA	461 N. Lake Ave.	(818)356-0391	or Fax	(818)356-0068
ROWLAND HEIGHTS	19230 E. Colima Rd.	(818)965-7004		(818)913-6936
SANTA FE SPRINGS	11861 E. Telegraph Rd.	(310)948-2060		(310)942-0440

STORE HOURS: M-F 9am - 7pm, Sat. 10am - 6pm Pasadena also open Sun. 12pm - 5pm

SONY

Sony has exactly what you're looking for.

Digital control Multiscan® monitors let you adjust how your images appear on screen. 17" and 20" models with Trinitron® CRTs for crisp, clear, bright, colorful images. Plus the new Energy Star-compliant Multiscan 17se with auto-optimizing features

NEW TECHNOLOGIES
COMPUTER APPLICATIONS

PASADENA
461 N. Lake Ave.
(818) 356-0391
(818) 356-0068 FAX

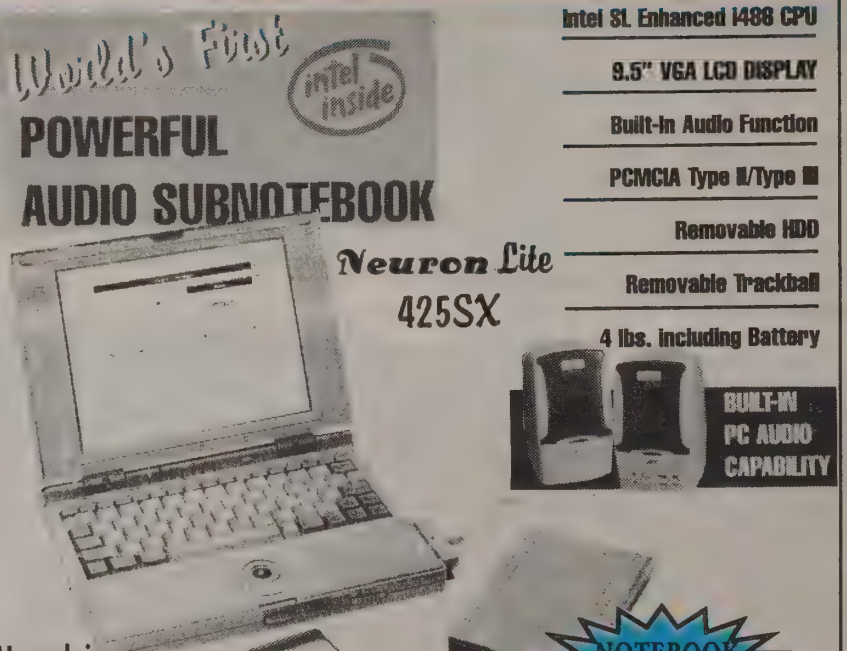
ROWLAND HEIGHTS
19230 E. Colima Rd.
(818) 965-7004
(818) 913-6936 FAX

SANTA FE SPRINGS
11861 E. Telegraph Rd.
(310) 9[illegible]
(310) 9[illegible] FAX

...ectronics Inc. Reproduction in whol...

The Smartest Design. The Smartest Buy.

Hyundai Neuron Lite! First In Its Class



- Intel SL Enhanced I486 CPU
- 9.5" VGA LCD DISPLAY
- Built-In Audio Function
- PCMCIA Type II/Type III
- Removable HDD
- Removable Trackball
- 4 lbs. including Battery

BUILT-IN PC AUDIO CAPABILITY

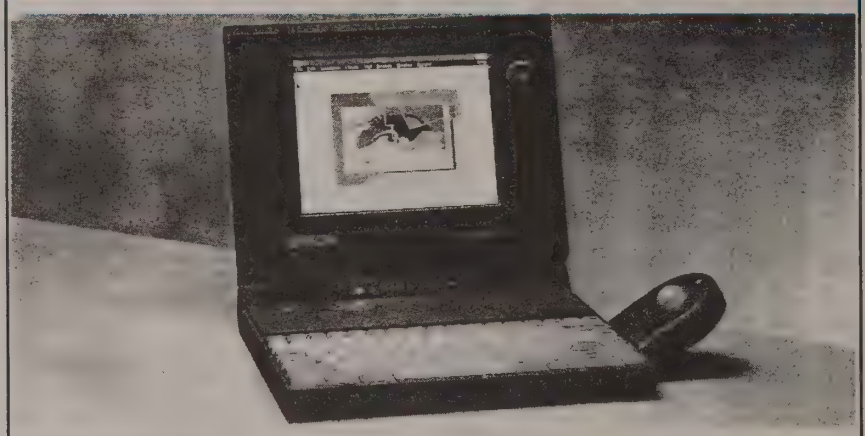
Hyundai 433SLC 4M/120HDD	$1355
486SX25 Subnote Multimedia 4M/120MHDD	$1499
433SLCC Color Passive Dual Scan 4M/170MHDD	$1999

NOTEBOOK SPECIALISTS!

DOS /Windows/PS2 Port Included.

EPSON

ActionNote 500C



1)ActionNote SLC2-50 4M/80MHDD	$1379
2)ActionNote SLC2-50 4M/120MHDD	$1457
3)ActionNote SLC2-50 4M/180MHDD	$1559
4)ActionNote Color 4M/120M 2400/9600 Fax/Modem	$2059
5)ActionNote SLC2-50 4M/180MHDD 2400/9600 Fax/Modem	$2175

ActionNote 4SLC2/50

- 50MHz 486SLC2 Processor
- 4MB Ram, expandable to 8MB
- Large 10" VGA LCD
- Internal 3.5" Floppy Drive

•Only 5.5lbs!
Free Logitech Trackman
Free Carrying Case
Epson Extra Care On-Site Warranties

ACCESSORY

1. 2400/9600 Fax Modem	$165
2. 14.4 Fax Modem	$235
3. 2400/9600 BPS Fax Modem PC Card	$182
4. 14400/14400 BPS Fax Modem PC Card	$285
5. Cigarette Adapter	$137
6. Numeric 10-key pad	$59
7. NiMH Butter Pack	$114
8. 2MB SRAM PC Card	$244
9. 4MB Memory Module	$299
10. 6MB Memory Module	$399
11. Math Co-Processor	$49
12. Carry Case	$49

HOT SALE! LIMITED QUANTITY!!

486SLC33 2M Expandable to 8M 120M HDD **$1149**

PORTCOM, INC.

NOTEBOOK SPECIALIST!

SALES: (213)385-3300
Technical Support: (213)385-6386
Toll Free: (800) 868-4600
FAX: (213) 385-6425
3530 Wilshire Bl. Suite #1465
Los Angeles, CA 90010

REVIEWS

Game Reviews

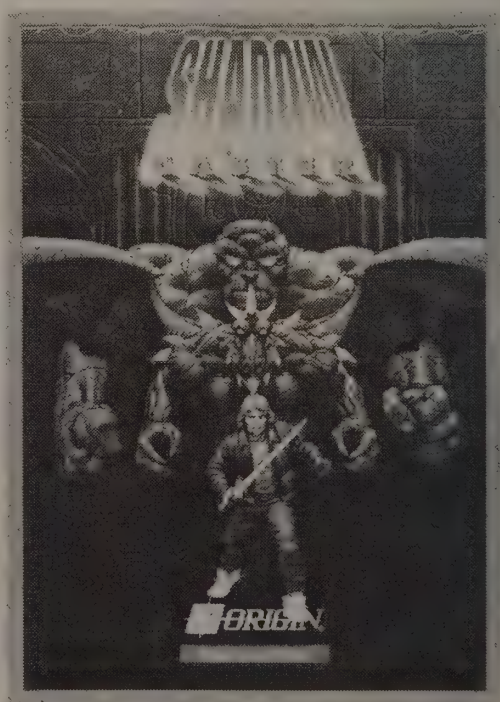
SHADOW CASTER

Designed By: Raven Software
Published By: Origin
For: IBM PC compatible, 386, 4MB RAM, Microsoft/Logitech mouse, 16MB available on the hard drive, MCGA/VGA, Sound Blaster/General Midi
List Price: $54.99
Reviewed By: Fred Haslam

Shadow Caster is a point-of-view dungeon game done right. It uses a flight simulator engine to let the player move with great realism. You can creep forward, peek around corners, or dash madly through a room dodging fireballs and monsters. This type of game has been done once before by Ultima Underworld. Shadow does it again with panache.

The key twist to Shadow is that your character is a shape-changer. You begin as a human, fighting off monstrosities with your fists and feet. Quickly you gain the ability to transform into the Maorin, a four-armed werewolf of great power. The transformation sequence alone is worth the price of admission. The Maorin has a weakness though. It floats like a bucket of mud—not at all. Later you gain the form of the Kahpa, an upright frog, which can breathe underwater. Over the course of the adventure you learn to transform into six different creatures, and you learn to switch between them to take advantage of their diverse powers.

The interface for Shadow Caster takes some getting used to. Reading over the quick reference card is enough to get started. Learning to use all the controls takes practice. The graphics are marvelous and varied—this game embodies a *lot* of work. The music is pleasant and unobtrusive, changing during combat to indicate enemy status. The sound effects are both good and useful. The best indicator that you are hit is when your character growls, grunts, or whines (depending on its form).



As a dungeon game, Shadow is clever and balanced. Your character improves just enough to keep the game challenging. The puzzles are tricky, but not frustrating. The mechanics of the RPG are hidden away from the player. All you see are hit points, magic points, and an occasional message indicating

Powerful Machine
Powerful Performance
Accurate Prices!!!

INTRODUCING PCI 486DX4-100MHZ SYSTEMS JUST ARRIVED!

ANTHURIUM'S PCI 486DX4-100MHZ !

486 DX4-100MHZ OPTI PREMIUM PCI MAIN BOARD
256K CACHE ON BOARD EXP. TO 512K CACHE
8MB ON BOARD EXP. TO 128MB
ANTHURIUM'S DELUXE SLIM LINE CASE W/200 WTS. LP P/S
INTEL 486DX4-100MHZ (NEW) LANDMARK 345 PROCESSOR 62.5
LOCAL BUS IDE & FLOPPY CONTROLLER OPTI 611 DISKMARK 1580
2 FAST SERIAL PORT 16550
1 FAST PARALLEL PORT SMC
345MB HARDRIVE FAST IDE
TSENG LAB 32P CHIPSET 1MB VIDEOBOARD EXP. 2MB
(WINBENCH 4.0 RUNNING AT 19.9)
3.5 TEAC FLOPPY
15" 1280X1024 RES. :28DP MONITOR KDS
124 KEYS PROGRAMMABLE KEYBOARD (FOCUS)
FREE MICROSOFT MOUSE
FREE TWO YEARS WARRANTY PARTS & LABOR
FREE TWO YEARS ON-SITE SERVICES
ANTHURIUM'S PCI 486DX4-100MHZ $2299

PENTIUM PCI 60/66 BEST BUY!

ANTHURIUM'S DELUXE SUPER TOWER CASE 3LED/ 300WTS P/S
INTEL PREMIER PCI MAINBOARD
INTEL MERCURY 82430 CHIPSET RUN AT 64BIT
256K CACHE ON BOARD WRITE BACK & WRITE THROUGH
8MB ON BOARD EXP. TO 128MB MEMORY (72 PIN SIMM)
IDE & I/O (2S/IP PORT) ON BOARD
345 MB IDE HARDDRIVE
TEAC 1.2 & 1.44 FLOPPY DRIVES
MICROCRYSTAL 16SI 2MB VIDEO BOARD PCI
(WINBEACH 4/0 TEST PERFORMANCE IS 22.90)
15" SVGA 1280 X 1024RES. .28DP MONITOR KDS
124 PROGRAMABLE KEYBOARD (FOCUS)
FREE MICROSOFT MOUSE
FREE TWO YEARS WARRANTY PARTS & LABOR
FREE TWO YEARS ON-SITE SERVICES
PCI PENTIUM 60MHZ $2799
PCI PENTIUM 66MHZ $2999

PENTIUM'S CRYSTAL PCI 60/66 CADD SYSTEMS!

ANTHURIUM'S DELUXE SUPER TOWER CASE 3LED/ 300 WTS P/S
INTEL PREMIER PCI MAINBOARD
INTEL MERCURY 82430 CHIPSET RUN AT 64BIT
256K CACHE ON BOARD WRITE BACK & WRITE THROUGH
INTEL PENTIUM 60/66 GOLD VERSION
8MB ON BOARD EXP. TO 128MB MEMORY (72 PIN SIMM)
I/O (2S/IP PORT) ON BOARD
525 MB SCSI II FUJITSU HARDDRIVE 8.5MS
PCI SCSI II NCR 53C810 CONTROLLER
TEAC 1.2 & 1.44 FLOPPY DRIVES
MICROCRYSTAL 16SI 2MB VIDEO BOARD PCI
(WINBEACH 4/0 TEST PERFORMANCE IS 22.90)
15" SVGA 1280 X 1024RES. .28DP MONITOR KDS
124 PROGRAMABLE KEYBOARD (FOCUS)
FREE MICROSOFT MOUSE
FREE TWO YEARS WARRANTY PARTS & LABOR
FREE TWO YEARS ON-SITE SERVICES
PCI PENTIUM CRYSTAL 60MHZ $3199
PCI PENTIUM CRYSTAL 66MHZ $3499

ANTHURIUM WARRANTY

• 2 YEARS PARTS/LABOR • 2 YEARS ON-SITE SERVICES
• 48 HRS PARS REPLACEMENT • LIFETIME TECHNICAL SUPPORT • 72 HRS SYSTEMS BURN IN TEST
100% CUSTOMER SATISFACTION

CALL ANTHURIUM TECHNOLOGY CORPORATION

1-800-PCI-0210

Anthurium TECHNOLOGY CO.

16371 GOTHARD STREET, SUITE #D
HUNTINGTON BEACH, CALIFORNIA 92647
Tel: (714) 375-0210 • Fax: (714) 375-0214

PRICES & PRODUCT DESCRIPTIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE/ON-SITE SERVICE MAY NOT BE AVAILABLE IN SOME AREAS.
THE INTEL INSIDE LOGO & PENTIUM ARE TRADEMARKS OF THE INTEL CORPORATION.

DON'T PASS UP THE
AT THE "LOW

486DX2-66/50EV

- 486 EISA + VLB Motherboard
- 8MB RAM, 128KB Cache
- 1.44MB Floppy Drive
- 420MB 13ms IDE Hard Drive
- VLB 32 Bit IDE I/O Controller
- VLB 32 Bit Graphic Accelerator w/1MB DRAM
- 14" SVGA N-I .28mm Monitor
- Full Size Tower Case
- Enhanced 101 Keys Keyboard
- Serial Mouse

66MHz.....$1619
33MHz.....$1499

4DX2-66/50V

- 486 VLB Motherboard
- 4MB RAM, 128KB Cache
- 1.44MB Floppy Drive
- 420MB 13ms IDE Hard Drive
- VLB 32 Bit IDE I/O Controller
- VLB 32 Bit Graphic Accelerator w/1MB DRAM
- 14" SVGA .28mm Monitor
- Medium Size Tower Case
- Enhanced 101 Keys Keyboard
- Serial Mouse

66MHz.....$1329
50MHz.....$1179

4CX-40VM

- 486 VLB Motherboard
- 4MB RAM, 128KB Cache
- 1.44MB Floppy Drive
- 200MB 15ms IDE Hard Drive
- VLB 32 Bit IDE I/O Controller
- VLB 32 Bit Graphic Accelerator w/1MB DRAM
- 14" SVGA N-I .28mm Monitor
- Extended Mini Size Tower Case
- Enhanced 101 Keys Keyboard
- Serial Mouse
- Mozart 16 Stereo Sound Card
- Phillip CD-ROM + CD Titles

$1249

4DX-40/33V

- 486 VLB Motherboard
- 4MB RAM, 128KB Cache
- 1.44MB Floppy Drive
- 340MB 13ms IDE Hard Drive
- VLB 32 Bit IDE I/O Controller
- VLB 32 Bit Graphic Accelerator w/1MB DRAM
- 14" SVGA N-I .28mm Monitor
- Medium Size Tower Case
- Enhanced 101 Keys Keyboard
- Serial Mouse

40MHz.....$1129
33MHz.....$1129

4CX-40/33V

- 486 VLB Motherboard
- 4MB RAM, 128KB Cache
- 1.44MB Floppy Drive
- 200MB 15ms IDE Hard Drive
- VLB 32 Bit IDE I/O Controller
- VLB 32 Bit Graphic Accelerator w/1MB DRAM
- 14" SVGA .28mm Monitor
- Extended Mini Size Tower Case
- Enhanced 101 Keys Keyboard
- Serial Mouse

40MHz $999
33MHz $999

4SX-33/25V

- 486 VLB Motherboard
- 4MB RAM, 128KB Cache
- 1.44MB Floppy Drive
- 200MB 15ms IDE Hard Drive
- VLB 32 Bit IDE I/O Controller
- VLB 32 Bit Graphic Accelerator w/1MB DRAM
- 14" SVGA .28mm Monitor
- Extended Mini Size Tower Case
- Enhanced 101 Keys Keyboard
- Serial Mouse

33MHz $969
25MHz $949

4DLC-40V

- 486 VLB Motherboard
- 4MB RAM, 128KB Cache
- 1.44MB Floppy Drive
- 200MB 15ms IDE Hard Drive
- VLB 32 Bit IDE I/O Controller
- VLB 32 Bit Graphic Accelerator w/1MB DRAM
- 14" SVGA .28mm Monitor
- Mini Size Tower Case
- Enhanced 101 Keys Keyboard
- Serial Mouse

$989

4SLC-33

- 486SLC ISA Motherboard
- 2MB RAM
- 1.44MB Floppy Drive
- 80MB 16ms IDE Hard Drive
- ISA 16 Bit IDE I/O Controller
- ISA 16 Bit Graphic Accelerator w/256KB DRAM
- 14" VGA Monitor
- Mini Size Tower Case
- Enhanced 101 Keys Keyboard
- Serial Mouse

$675
4SLC-66.....$775

DOUBLE/TRIPLE SPEED MULTIMEDIA

4DX2-66V2xM

- 486 VLB Motherboard
- 4MB RAM, 128KB Cache
- 1.44MB Floppy Drive
- 420MB 13ms IDE Hard Drive
- VLB 32 Bit IDE I/O Controller
- VLB 32 Bit Graphic Accelerator w/1MB DRAM
- 14" SVGA N-I .28mm Monitor
- Medium Size Tower Case
- Enhanced 101 Keys Keyboard
- Serial Mouse
- Spectrum 16 Sound Board SCSI Interfaced
- NEC SCSI Double-Speed CD-ROM
- Multi Media CD Titles

$1758

4DX2-66V2xM

- 486 VLB Motherboard
- 4MB RAM, 128KB Cache
- 1.44MB Floppy Drive
- 420MB 13ms IDE Hard Drive
- VLB 32 Bit IDE I/O Controller
- VLB 32 Bit Graphic Accelerator w/1MB DRAM
- 14" SVGA N-I .28mm Monitor
- Medium Size Tower Case
- Enhanced 101 Keys Keyboard
- Serial Mouse
- Sound Blaster 16 Sound Board
- Panasonic Double-Speed CD-ROM
- Multi Media CD Titles

$1678

4DX2-66V3xM

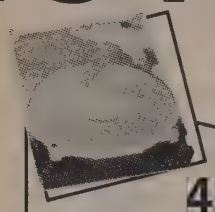
- 486 VLB Motherboard
- 8MB RAM, 128KB Cache
- 1.44MB Floppy Drive
- 420MB 13ms IDE Hard Drive
- VLB 32 Bit IDE I/O Controller
- ATI Mach32 Graphic Ultra Pro VLB with 2MB DRAM
- 15" SVGA N-I .28mm Monitor
- Medium Size Tower Case
- Enhanced 101 Keys Keyboard
- Serial Mouse
- Sound Blaster 16 SCSI-2 Sound Board
- NEC Triple-Speed CD-ROM
- Multi Media CD Titles

$2469

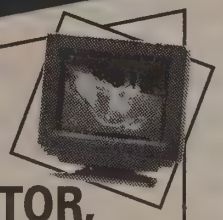
MEMORY & CPU UPGRADE FOR IBM, COMPAQ & MOST WELL-KNOWN NAME BRAND COMPUTERS AVAILABLE!

TSC Computer Products
1819 N. Floraldale Ave.
So. El Monte, CA 91733
Tel (818) 579-2405
Tech. Support (818) 579-1446
FAX (818) 579-9572

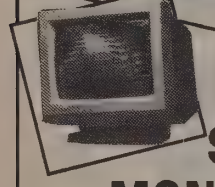
"BEST QUALITY"
"BEST PRICES!"



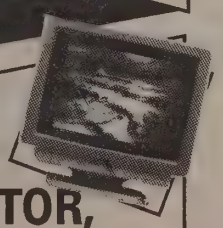
420MB 3.5" IDE HARD DRIVE
(13ms Access Time)
$295



15" SVGA MONITOR,
1280x1024, .28dp, FLAT SCREEN, 72Hz REFRESH
$355



17" SVGA MONITOR,
1280x1024, .26dp
$665



14" MONITOR,
1024x768, .28dp, NON-INTERLACED
$259

MOTHERBOARD

Pentium P5-60MHz VLB w/512K Cache	$1195
EISA+VLB 486DX2-66MHz w/256K Cache	$490
EISA+VLB 486DX-40MHz w/256K Cache	$395
EISA+VLB 486DX-33MHz w/256K Cache	$395
VESA LB 486DX2-66MHz w/128K Cache	$400
VESA LB 486DX2-50MHz w/128K Cache	$325
VESA LB 486DX-40MHz w/128K Cache	$315
VESA LB 486DX-33MHz w/128K Cache	$315
VESA LB 486SDX-33MHz w/128K Cache	$225
VESA LB 486SDX-40MHz w/128K Cache	$235
VESA LB 486SX-33MHz w/128K Cache	$185
VESA LB 486DLC-40MHz w/128K Cache	$205
ISA 486DLC-40MHz w/128K Cache	$175
ISA 486SLC-33MHz	$85
ISA 386DX-40MHz w/128K Cache	$95
ISA 386SX-40MHz	$75
INTEL CPU	*add $50*
**ALL 486's CPU RECOMMENDED CPU FAN **	
CPU Cooling Fan	$15

VIDEO CARD

Monographic Printer Card	$13
VGA 16 Bit 256K Card (800x600 Res.)	$26
VGA 16 Bit 512K Card (1024x768 Res.)	$34
VGA 16 Bit 1MB Card (1024x768x256 Color)	$55
Windows Accelerator w/1MB VGA Card	$69
Speedstar Pro Windows Accelerator	$119
ATi Graphic Ultra Pro w/2MB VRAM	$345
ATi Graphic Ultra Plus w/2MB DRAM	$289
VLB Windows Accelerator Speedstar Pro	$119
VLB Cirrus Logic w/1MB Upgrade To 2MB	$89
VLB S3-805 Chip Windows Acc. w/1MB	$125
VLB Stealth Pro VRAM 1MB	$249
VLB ET4000/32 w/1MB (1280x1024 Res.)	$139
VLB ET4000/W32i w/2MB	$175
VLB ATi Graphic Ultra Pro w/2MB VRAM	$345
VLB Diamond VIPER w/2MB VRAM	$345
VLB Fahrenheit VA w/1MB Upgradable To 2MB	$160

MONITOR

VGA Monitor	$195
14" SVGA 1024x768, .39dp	$225
14" SVGA 1024x768, .28dp	$235
14" SunShine 1024x768, .28dp N-I	$275
14" PROTON 1280x1024, 72Hz, .28dp	$310
15" SunShine 1280x1024, N-I .28dp	$380
17" SunShine 1280x1024, N-I .26dp	$675

CASE

Mini Tower Case w/Power Supply	$45
Mid Size Tower Case w/Power Supply	$65
Full Size Tower Case w/Power Supply	$85

HARD DRIVE

IDE 40MB Hard Drive	$125
IDE 80MB Hard Drive	$140
IDE 100MB Hard Drive	$169
IDE 120MB Hard Drive	$175
IDE 170MB Hard Drive	$180
IDE 210MB Hard Drive	$195
IDE 240MB Hard Drive	$225
IDE 340MB Hard Drive	$275
IDE 420MB Hard Drive	$295
SCSI 210MB Hard Drive	$260
SCSI 340MB Hard Drive	$370
SCSI 535MB Hard Drive	$599
SCSI 1.0GB Toshiba Hard Drive	$860

CONTROLLERS

AT I/O 2 Serial, 1 Parallel, 1 Game Port	$14
High Speed AT I/O (2S, 1P, 1G)	$35
IDE Hard & Floppy Controller & I/O	$18
IDE Hard & 4 Floppy Controller	$36
IDE Cache Controller w/1M (DC600)	$139
AT RLL HD/FD Controller	$45
AT MFM HD/FD Controller	$43
SCSI HD Controller	$85
SCSI Cache Controller (DC800)	$225
VLB IDE HD/FD & I/O Controller	$29
VLB IDE Cache Controller (DC680)	$125
VLB SCSI Controller	$125
EISA SCSI Cache Controller w/1M (DC820)	$420

KEYBOARD

101 Enhanced Non-click Keyboard	$19
101 Enhanced Click Keyboard	$23
FOCUS 7000 Keyboard	$45
FOCUS 9000 Keyboard	$68

FLOPPY DRIVE

NEC 1.2 Floppy Drive	$50
NEC 1.44 Floppy Drive	$47
TEAC 1.2 Floppy Drive	$52
TEAC 1.44 Floppy Drive	$50
TEAC 1.2 & 1.44 On ONE FDD	$135

MULTIMEDIA UPGRADE KIT

Double-Speed CD-ROM Sound Blaster Pro 5 Title CD Disk	$399
Toshiba Double-Speed CD-ROM (200ms) Pro Audio Spectrum 16 5 Title CD Disk	$499
NEC Triple-Speed CD-ROM (195ms) Sound Blaster SCSI 16 5 Title CD Disk	$599
Double-Speed CD-ROM w/Controller	$199
CD-ROM with Controller	$145
NEC Triple-Speed CD-ROM	$365

SOUND BOARDS

Sound Blaster 16	$115
Sound Blaster Pro	$110
Pro Audio Spectrum 16	$125
Sound Boomer Card	$58
Speaker For Sound Board	$15

TAPE BACKUPS

Tape Backup Colorado DJ-10	$138
Tape Backup Colorado DJ-20	$175
Tape Backup Archive 250MB	$165
Tape Cartridges 2120 250MB	$15

MICE

Mouse Hi-Resolution	$18
Mouse CP-3	$10
Truedox Trackball	$25

FAX & MODEM

Internal 2400B Modem	$30
Internal 9600 Fax 2400B Modem	$40
Internal 14.4 Fax 14.4 Modem	$135
External 14.4 Fax 14.4 Modem	$185

NETWORK CARD

Ethernet 8 Bit (NE1000)	$45
Ethernet 16 Bit (NE2000)	$45
Ethernet 16 Bit (10 Base-T)	$55

TERMS & CONDITIONS

- 1 Year Warranty (Parts & Labor)
- Prices Are Subject To Change Without Notice
- Defective Merchandise Must Have RMA Authorization
- 15% Restocking Charge
- Terms COD Or Prepaid (Cashier Check, Company Check, OAC)
- All Systems 14 Day Money Back Guarantee
- Quantity Discount Available
- Technical Support: (818) 579-1446

IDE CACHING CONTROLLER
w/1MB, IT SUPPORTS 4HD & 2FD MAX. 16MB (256/1MB/4MB Simm & Can Be Mixed)
$115

VLB IDE CACHING CONTROLLER,
IT SUPPORTS 4HD & 2FD MAX. 16MB (256/1MB/4MB Simm & Can Be Mixed)
$125

HIGH SPEED I/O CARD,
2 SERIAL PORT/2 PRINTER PORT (FIFO) w/16550 CHIP 4 INDEPENDENT IRQ LEVELS FOR SERIAL PORTS (IRQ 3,4,5,9)
$35

80MB 3.5" IDE HARD DRIVE,
3.5" FORMAT, 1" HEIGHT
$140

ASC
COMPUTER
2776 Ventura Blvd. Suite A
Woodland Hills
Tel (818) 876-9187
FAX (818) 876-9189

N.S.C.
NETWORK SOLUTION COMPUTER
1928 Tyler, Suite A-168
So. El Monte, CA 91733
Tel (818) 454-1039
FAX (818) 454-1040

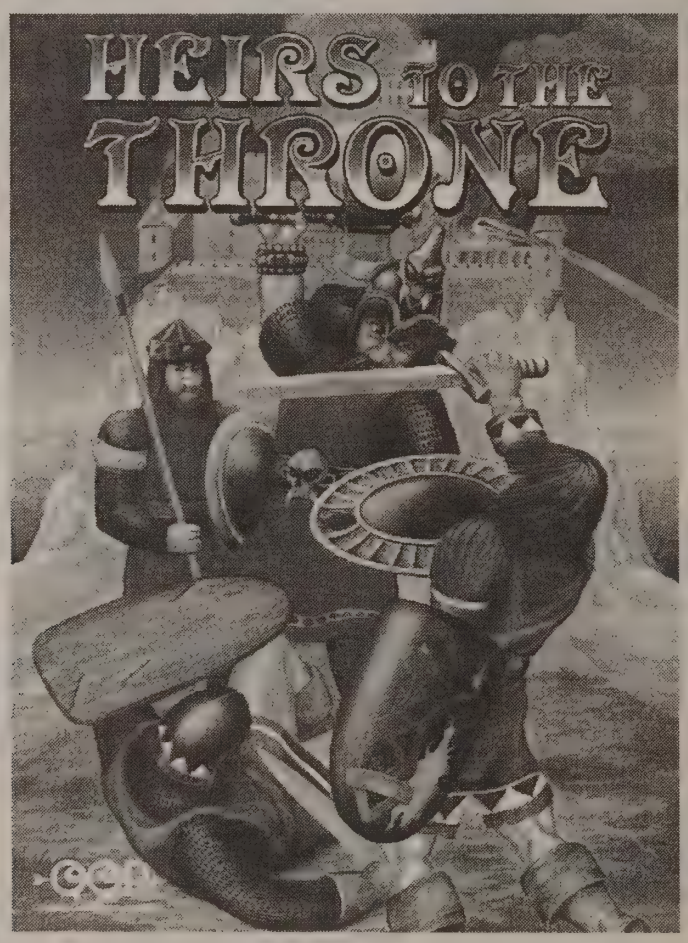
WE ALSO CARRY:
IBM/COMPAQ SYSTEMS & HP LASER JET PRINTERS
IBM COMPAQ ATi Microsoft HEWLETT PACKARD
WINDOWS COMPATIBLE
Product names or trademarks shown herein are property of their respective companies.

Office Hours:
Monday Thru Friday
9:00 AM-6:00 PM
PRICES GOOD W/THIS AD!

that you have gained a level. I highly recommend this game with one word of caution. If you have trouble with arcade games, you may have some trouble coordinating actions in Shadow Caster. (Origin, Inc., PO Box 161750, Austin, TX 78716. 512/335-0440)

HEIRS TO THE THRONE

Designed By: R.K. Rien
Produced By: German Design Group
Published By: Quantum Quality Productions
For: IBM PC compatible, 640K RAM, DOS 3.3, hard drive, EGA/VGA, mouse
List Price: $44.99
Reviewed By: Fred Haslam



Heirs to the Throne is a maddeningly addictive medieval strategy game. I use those words with exactitude—this European import is both maddening and addictive. The game is addictive in the "I'll just do one more turn" manner. Just-one-more-turn usually becomes several dozen turns and takes over an evening.

The game is definitely maddening. There is no real difficulty setting, so even the easiest game pits you against full computer strategy. It is difficult to win no matter what settings you use. Even worse, sometimes you know you can win, but it will take you several *hundred* turns to do so.

At first I thought this game was a simple "build the armies and attack," but the computer opponents maneuver their men with great care. They only attack when they will win and withdraw when they would lose. The game becomes intricate and chess-like, very much like warfare during the time of Frederick the Great. Although the computer opponents are nearly automatic, the presence of three foes introduces an element of chaos. It is possible to enter into stable, static situations. It is equally possible to find armies shifting back and forth with alacrity.

The interface is non-intuitive. You must read the rules to understand what to do. You must constantly indicate when you want to make *another* attack or *another* move. You can make a simple mistake this way and blow your whole game. Fortunately, everything is mouse driven, the one bright spot in the interface. The music is good and can be turned off (unlike some European imports). The artwork is of poor quality, mostly consisting of digitized drawings. It is possible to play the game with up to three friends.

As a strategy game, Heirs is complex in its simplicity. It can be described with some accuracy as Combat Go. I recommend the game to staunch strategy gamers, but not to newcomers. The interface is frustrating and requires patience. The game is harsh and unforgiving. Being a staunch strategy gamer, I enjoyed it tremendously. (Quantum Quality Productions, 495 Hwy. 202, Flemington, NJ 08822. 908/788-2799)

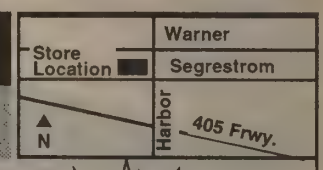
Software Utilities Review

ADOBE ACROBAT FOR DOS/MACINTOSH

Published By: Adobe Systems
System Requirements: DOS version: 386\486 PC, DOS 3.3 or higher, 3.5" floppy drive and 5MB of free hard disk space, (Exchange requires Windows 3.1, Distiller requires Windows 3.1 and 8MB of RAM, minimum). Macintosh: Mac Plus, SE, Classic, LC II or better, System 6.0.5 or greater, 2MB of application RAM (Distiller requires 68020 processor or better with 6MB of RAM)

Continued...

M-TEK COMPUTER
TEL: 714/850-1044 FAX: 714/850-0321
2760 S. Harbor Blvd., Suite G, Santa Ana, CA 92704



WE WILL MATCH OR BEAT ANY REASONABLE PRICE

We Service System Upgrades & Repairs!
Price subject to change without notice.

MONITORS
Arcus 14" Mono $90
Arcus 14" SVGA (1024x768, .28) 230
✔Arcus 14" SVGA (1024x768, NI) 255
✔Arcus 15" SVGA (1280x1024, NI) 340
MAG MX15F SVGA (0.28dp, 1280x1024) 445
✔MAG MX17F SVGA (0.26dp, 1280x1024) 830
Shamrock 14" SVGA (0.28dp, 1024x768) 230
Shamrock 14" SVGA (1024x768, NI) 235
Shamrock 15" SVGA (1280x1024, NI) 320
Please CALL for all Nanao, NEC, Optiquest, CTX, Tatung & ViewSonic Monitors!

HARD DISK DRIVES
MAXTOR:
170MB IDE 15ms $190
245MB IDE 14ms 235
345MB IDE 10ms 275
540MB IDE 10ms 415
WESTERN DIGITAL:
210MB IDE 13ms $210
250MB IDE 15ms 230
340MB IDE 13ms 280
✔420MB IDE 13ms 290
Please CALL for Micropolis, Seagate, Quantum, Toshiba & SCSI Drives!

TAPE BACKUP
Colorado DJ-20 250MB Internal $169
Colorado Trakker 250MB Ext. (Parallel Port) 330
Conner 250MB Internal w/Tape 165
Please CALL for Exabyte & Summit Tape Backups!

VIDEO CARDS
✔Diamond Stealth Pro VLB $235
✔Diamond Viper VLB w/2MB VRAM 360
Diamond SpeedStar VLB w/1MB 125
Genoa VLB w/1MB 110
Please CALL for ATI, Cirrus Logic, Genoa, Trident Cards!

CD-ROMS
Mitsumi (Internal 250ms) $185
Panasonic (Internal 320ms) 185
✔Sony 33A (Internal 320ms) 175
Texel 3028 (Internal 240ms SCSI) 295
✔Toshiba 3401B (Internal, 200ms SCSI) 330
NEC Triple Spin ..... CALL
External CD-ROM for Notebook ..... CALL
Please CALL for Multi-Media Packages!

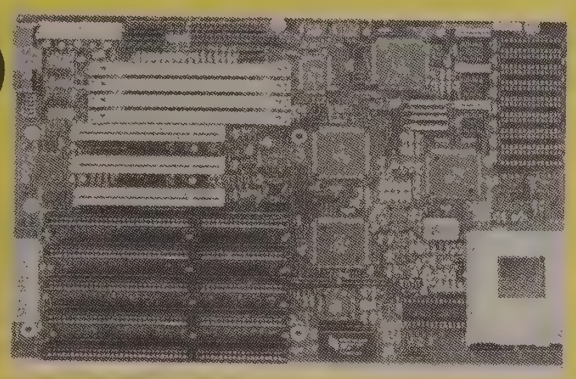
PLEASE CALL FOR: NOTEBOOK SYSTEM CONFIGURATIONS & PRICES! CUSTOM BUILT PENTIUM & 486 SYSTEMS!

MICRONICS

PENTIUMS—SHIPPING NOW!

The Ultimate in Speed. The Ultimate in Performance.

intel inside



PCI/VESA/EISA

MICRONICS PENTIUMS; PCI Committee
MICRONICS "GREEN" ENERGY EFFICIENT
MICRONICS 66 PCI & VESA
MICRONICS 50 DX2 PCI & VESA
MICRONICS 486/33 PCI & VESA
MICRONICS 486/25 PCI & VESA

NEW MICRONICS M5PI SYSTEM BOARDS ARE PENTIUM-BASED PCI PRODUCTS DESIGNED FOR POWER USERS. THESE NEW BOARDS ARE TARGETED AT THE HIGHEND DESKTOP WORKSTATION AND NETWORK SERVER MARKETS–WHERE APPLICATIONS REQUIRE THE HIGH PERFORMANCE OF THE PENTIUM TECHNOLOGY AND THE HIGH THROUGHPUT OF THE PCI ARCHITECTURE. IN JUNE 1992, INTEL & SEVERAL OTHER COMPUTER-INDUSTRY COMPANIES, INCLUDING MICRONICS, FORMED THE PCI SPECIAL INTEREST GROUP TO DEVELOP & PROMOTE THE PCI SPECIFICATION AS AN INDUSTRY STANDARD. MICRONICS COMPUTERS, INC. (FREMONT, CA) IS THE LARGEST INDEPENDENT 386, 486,PENTIUM MANUFACTURER IN THE U.S.A.

PENTIUM POWER

- ★ MICRONICS Pentium PCI Mboard
- ★ 420MB Western Digital #2420A Hdrive
- ★ MICRONICS PCI Onboard Hi-Speed Ctlr
- ★ 8MB SIMM Memory; 70ns
- ★ 1.2MB & 1.44MB Teac Floppy
- ★ Diamond VIPER PCI Video/2MB VRAM
- ★ Northgate Omnikey Ultra Kybd
- ★ Authorized MICRONICS distributor
- ★ Many Monitors To Choose From

$2599

VESA 66

- ★ USA-Built **MICRONICS** 486 Vesa/66MHz
- ★ 250MB Western Digital 2250 Hard Drive
- ★ 8MB Simm Memory; 70ns
- ★ 1.2MB & 1.44MB Teac Floppy Drive
- ★ Micronics Vesa 32-Bit VideoAdapter/1MB
- ★ Dual Serial/Parallel Adapter
- ★ PC Power & Cooling Fan
- ★ Northgate Omnikey Ultra Keyboard
- ★ Options: Any Hard Drive; Any Video

$1599

CALL FOR YOUR NETWORKING NEEDS & SPECIAL CONFIGURATIONS

IBM® HEWLETT PACKARD Authorized Dealer

TOSHIBA

COMPAQ

OPEN EVENINGS
7th Year, Member of the Better Business Bureau

MICRONICS COMPUTERS INC. is a Participating Member of the Video Electronics Standard Association (VESA)
Authorized MICRONICS Distributor Since 1987

WE STOCK ALL MICRONICS BOARDS, MEMORY & PERIPHERALS...
CALL US FOR BEST PRICING!

***The Intel Logo is a trademark of the Intel Corporation.**

3-6 COMPUTERS
2124 CAHUENGA BLVD. HOLLYWOOD, CA 90068
PHONE 213 466-3636
FAX 213 466-3693

USM offers the latest in cutting edge technology from industry leaders.

In the rapidly changing PC World, we continue to be successful because we don't "just" sell a computer system. USM sets a new standard in quality. We integrate the latest technological innovations with service that you can depend on. We're number one because we put your interests number one. Visit us today and talk to our friendly staff about your computer needs. We'll be happy to assist you in making the best decision. It's the "USM Way" of doing business.

PENTIUM

- Mach VIII PCI Motherboard
- Intel 60MHz CPU
- 256KB Cache
- 8MB 70ns RAM
- 1.44MB Floppy Drive
- 420MB IDE Hard Drive
- Mini Tower Case
- 101 Keyboard
- PCI Video Card 2MB VRAM
- PCI/IDE Controller
- 14" SVGA Monitor NI .28dp
- MS-DOS 6.2
- 2 Serial, 1 Parallel port
- Full System Burn-In

$2,695

486 VLB

- Mach V 486DX-33 CPU
- 4MB 70ns RAM
- 345MB Hard Drive
- 14" SVGA Monitor .28dp
- VLB 1MB Video Card
- 1.44 Floppy Drive
- Mini-Tower case
- 101 Keyboard
- MS-DOS 6.2
- Full System Burn-In

$1,395

IBM 486

- IBM 486-66 MHz CPU
- 4MB 70ns RAM
- 210MB Hard Drive
- VLB/IDE Controller
- 14" SVGA Monitor .28dp
- VLB 1MB Video Card
- 1.44 Floppy Drive
- Mini-Tower case
- 101 Keyboard
- IBM DOS 6.1
- 2 Serial, 1 Parallel port
- Full System Burn-In

$1,195

We welcome POs from School Districts, Universities, Federal and State Government and Corporations*

**** On approved credit.***

The "USM Advantage" System Warranty

- Two Years Labor and One Year Parts, Limited Warranty.
- 72-Hour Parts Repair or Replace. *
- 15-Day "No Hassle" Money Back Guarantee. *
- Free Telephone Technical Support

* Applies only to USM's standard configuration.
Not available on customized systems or special order items.

486-33

- 486SX-33 CPU
- 4MB 70ns RAM
- 170MB Hard Drive
- IDE Controller
- 14" SVGA Monitor .28dp
- Video Accelerator Card
- 1.44 Floppy Drive
- Mini-Tower case
- 101 Keyboard
- MS-DOS 6.2
- 2 Serial, 1 Parallel
- Full System Burn-In

$999

Novell Certified NetWare Engineer

- Design
- Installation
- Cabling
- Troubleshooting
- Free Consultation

MULTIMEDIA

- Double-Speed CD-ROM
- 16-bit Stereo Sound Card
- Pair of Speakers

$295

CD TITLES

Animals (PC, MAC)	$23				
Bible (PC)	$27				
Capitol Hill (PC, MAC)	$22				
Chessmaster 3000 (PC)	$20	King's Quest V (PC)	$16	Profiles of US Colleges (PC)	$15
CIA Fact Book (PC, MAC)	$20	Kodak Photo to CD (PC)	$23	Publish It! (PC, MAC)	$22
Classic Collection (PC)	$49	Languages of the World (PC)	$30	Q and A (PC)	$45
Color It! (MAC)	$23	Library of the Future (PC)	$29	Sherlock Holmes (PC, MAC)	$23
Composer Quest (PC)	$25	Loom (PC)	$23	Space Quest IV (PC)	$16
Desert Storm (PC, MAC)	$23	Lucas Arts Game Pack (MAC)	$32	Space Shuttle (PC, MAC)	$22
Dinosaurs (PC)	$19	Magazine Rack (PC)	$23	Star Wars Chess (PC)	$23
Electronic Home Library (PC)	$32	Mammals (PC)	$23	Stellar VII (PC)	$16
Encyclopedia (PC, MAC)	$46	Mario Deluxe (PC)	$19	Time Table Entertainment (PC)	$22
Family Doctor (PC,MAC)	$25	Mario's Early Years (PC)	$23	Time Table Science (PC, MAC)	$22
Food Analyst (PC)	$25	Mavis Beacon Typing (PC)	$22	Travel Companion (PC)	$23
Game Pack (PC)	$30	Mixed up Mother Goose (PC)	$16	US History (PC, MAC)	$28
Great Cities I or II (PC)	$23	Monkey Island (PC)	$23	US or World Atlas (PC, MAC)	$18
Guiness Records (PC, MAC)	$28	National Parks (PC)	$18	US & World Atlas (PC,MAC)	$25
Harry's Storydisk (PC)	$23	Newsweek (PC)	$20	Video Almanac (PC)	$23
Interactive Story (PC, MAC)	$20	Oceans Below (PC,MAC)	$23	Willie Beamish (PC)	$16
Jones in the Fast Lane (PC)	$16	Orient (MAC)	$25	Wing Commander/Ultima 6	$18

Experience a new dimension in personalized service, the USM way.

At USM, "You get what you pay for", and we mean it. We take care of your needs until you are completely satisfied. We have phones in our production area so our customers can get fast, direct support from the people who actually build and service our systems. No pre-recorded technical support menus, no one reading from a script. We deliver Performance, Dependability, and Value unmatched by anyone. Just another part of the "USM way" of doing business.

State of the Art Technology

American Megatrends — World Leader in Hardware Design

Factory Authorized Distributor

AMI Pentium PCI ISA 60MHz	$1745
AMI Pentium VLB ISA 60MHz	$1695
Enterprise IV 486-33/66 EISA VLB	$795/$995
Enterprise III 486-33/66 EISA	$895/$1095
Supervoyager II PCI 486-33/66	$795/$995
Supervoyager II 486-33/66 VLB	$630/$830

USM USMACH — **Setting a New Standard in Quality**

Mach VIII Pentium PCI 60 MHz	$1295
Mach V "Green PC" 486DX-33 VLB	$460
Mach V "Green PC" 486DX2-66 VLB	$660
Discovery ISA/VLB 486-33/66	$430/$630
Challenger EISA/VLB 486-33/66	$580/$780
Columbia 386DX-40	$145

MICRONICS

Factory Authorized Distributor

Micronics Pentium 60MHz PCI ISA	$1595
Micronics EV 486-33/66 EISA VLB	$825/$1025
Micronics E3 486-33/66 EISA	$750/$950
Micronics JX30 486-33/66 VLB	$640/$840

IBM

486 SLC2-66 - 3 VLB slots	$375

CONNER

170MB IDE	195
200MB IDE	215
340MB IDE	285
420MB IDE	325
540MB IDE	445
1.0GB SCSI	825

MAXTOR

130MB IDE	193
170MB IDE	195
245MB IDE	245
245MB SCSI	275
340MB IDE	295
340MB SCSI	375
540MB IDE	440
540MB SCSI	595
1.2GB SCSI	1195

MICROPOLIS

5-Year Warranty

1.0GB IDE/SCSI	860/880
1.7GB IDE	1230
1.7GB SCSI	1250
2.0GB SCSI	1525
3.0GB SCSI	2200

VIDEO CARDS

AMI Fastview 2MB VLB	375
ATI Ulttra Pro 2MB VLB/PCI	375/395
Cirrus Logic 1MB 16/24/32	75/90/95
Trident 1MB VLB	85

5-Year Warranty

Diamond Speedstar ISA/VLB	115
Diamond Stealth 24 ISA/VLB	157
Diamond Stealth 32 2MB PCI	255
Diamond Stealth Pro ISA/VLB	250
Diamond Viper 2MB VLB/PCI	409/426

MONITORS

Mitac 14" SVGA .28	265
Mitac 15" SVGA NI .28	385
NEC 3FGE/4FGE	620/735
NEC 5FGP/6FGP	1195/2150
Viewsonic 14E	310
Viewsonic 15	455
Viewsonic 17	950
Viewsonic 20/21	1500/1740

3-Year Warranty

Mitac 15" SVGA NI .28	415
Mitac 15" SVGA NI .28 MPR-II	445
Mitac 17" XVGA NI .26 MPR-II	785
Mitac 21" XVGA NI .25 MPR-II	1795

CD-ROM

Toshiba XM4101B 320ms	220
Toshiba XM3401B 200ms	350
Toshiba XM3401E 200ms	425
NEC CDR-74 Ext 280ms	445
NEC CDR-84 Int 280ms	420
NEC CDR-3X Int 195ms	Call
Mitsumi Int 250ms	180

Multimedia

Creative Labs - Discovery	445
Creative Labs - Edutainment	500
Creative Labs - Video Blaster	355
Creative Labs - Video Spigot	295
Media Vision Fusion CD	525
Mitac Multimedia Upgrade Kit	390
Soundblaster 16/SCSI ASP	210/225
Soundblaster 16/SCSI	175/200
Pro-Audio Spectrum 16 SCSI	145
Pro-Audio Movie Spectrum	315

FAX/Modem

Intel 9624/14.4	65/175
Voice Mail/FAX/Modem	252

5-Year Warranty

USRobotics 14.4 - Int/Ext	177/199

Controllers

Adaptec 1522K/1522K+	140/194
Adaptec 1542C+/1542C+K	244/306
Adaptec 2742TK	363
AMI Fastdisk EISA/VLB OK	395/395
Buslogic VLB SCSI	270
Buslogic EISA SCSI2	295
Buslogic IDE Caching OK	130
DTC IDE EISA	129
DTC VLB SCSI2	129
Winbond IDE VLB with I/O	50

Tape Back-up

Archive 250MB w/tape	175
Colorado DJ20 250MB	179
Colorado JT20 250MB Par.	347
Colorado 2.0GB Power Tape	975
Colorado 4.0GB Power Tape	1195
Exabyte EXB4200S 2.0GB	1056
Exabyte EXB8200S 2.5GB	1475

Removable Media

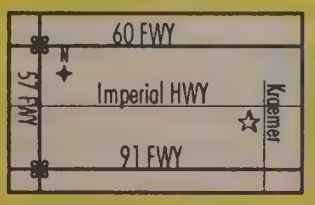
Syquest 105 MB - Internal	335
Syquest 105 MB - External	425
Syquest 105MB Cartridge	70

Discover Service . . . The USM way!

USM USMACH

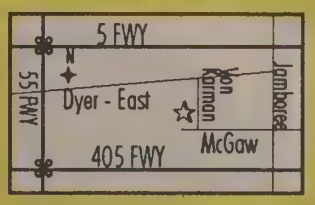
Visa and Mastercard accepted. No surcharge for credit cards.
Price and availability subject to change without notice.

USM Brea



2500 E. Imperial Hwy Ste 132
(714) 255-0113
FAX: (714) 255-0115
Hours: M-F 9-6 Sat. 10-5

USM Irvine



17145 Von Karman Ave Ste 109
(714) 252-8335
FAX: (714) 252-8354
Hours: M-F 9-6 Sat. 10-3

7 Locations
to serve you!

USM Sunnyvale - (408) 738-8291
USM Palo Alto - (415) 325-0651
USM Fremont - (510) 623-9040
USM San Francisco - (415) 952-5885
USM Santa Clara - (408) 980-0602

Since 1983

Computer Systems PUMPED UP!

You ll never find the amount of technology featured in our systems anywhere else for the price!

Complete Systems

Three 32-Bit Vesa Local Bus Slots, Three 16-Bit Expansions Slots, One 8-Bit Slot
Pentium™ Technology Ready - ZIF Socket
256K External Cache
1.44MB Teac & 1.22MB Teac Floppy Drives
14 Inch SVGA .28dp NI 1024x768
101 Enhanced Keyboard
Microsoft Compatible Mouse
DOS 6.2 with Enhanced Tools AUTHENTIC
Windows for Workgroups 3.11
Landmark's WINPROBE Diagnostic Software
30-Day Money Back Guarantee
2-year parts & Lifetime Labor Warranty

intel inside **$1239** MICROSOFT® WINDOWS™ COMPATIBLE

Intel™ sx-25	$1239	Intel™ sx-33	$1269
Intel™ DX-33	$1439	Intel™ DX-50	$1609
Intel™ DX2-50	$1479	Intel™ DX2-66	$1579

ADD Multimedia

$1518

Intel™ sx-25	$1518	Intel™ sx-33	$1548
ntel™ DX-33	$1718	Intel™ DX-50	$1888
Intel™DX2-50	$1758	Intel™ DX2-66	$1858

Hard Drives

260MB Seagate 16ms $205
340MB Conner 13ms $240
420MB Conner 14ms $265
420MB W Digital 13ms Cavier 2420 $289
420MB W Digital 12ms Cavier 2420 $319
540MB Quantum 13ms $409
540MB W Digital 12ms Cavier 2540 $419
1 GB Micropolis (5 Year Warrantee) $899

Monitors

14" CTX SVGA 1024x768/ .39 $185
14" Edison SVGA .28dp NI $235
14" CTX 5468A SVGA .28dp $216
14" CTX 1451 SVGA .28dp NI $235
14" CTX Low Rads SVGA .28dp 72Hz $260
15" Edison SVGA .28dp NI $315
15" CTX Low Rads SVGA .28dp 72Hz $339
NEC & VIEWSONIC sold here

MotherBoards, CPU's and Memory
486 VLB, 256K Cache, with 4MB 72-Pin Simm **$259**
All Intel 486 & 386 Microprocessors **CALL**
1x3, 1x9, 4x9 SIMM CALL

MORE TECHNOLOGY PER DOLLAR!

800 94-NINTH 800 946-4684
909 869-6580 Mon-Fri 8am-6pm
Fax 909-869-6583

Delivery in 72 hours or possibly same day if order received before 1pm

Ninth Generation Systems

1140 Centre Drive, Unit W
City of Industry, Ca., 91789

PRODUCT SPOTLIGHT

List Price: Acrobat Reader $50, Exchange $195, Distiller $695
Reviewed By: Lenny Bailes

As DOS, Macintosh, and UNIX environments become more and more interconnected, software manufacturers have begun to recognize the user's desire for a universal file format. Ideally, such a format would allow you to transmit text, graphics, and sound between computing platforms running different operating systems. The document's original appearance would be duplicated on each platform. You could view it, print it, or edit it, then email it back via modem or network.

Adobe Systems, Inc., the inventor of PostScript, has taken a step toward realizing this goal by introducing its proprietary Portable Document Format (PDF). PDF files serve as the container for desktop published documents. The documents may use multiple fonts, imbedded graphics, and hypertext links. The PDF files, themselves, consist only of 7-bit ASCII characters that can be easily transmitted between computing platforms. The complete document is re-created by Adobe Acrobat software written for the appropriate platform.

Acrobat consists of three parts, the Reader, the Exchange utility, and the Distiller (which translates PostScript files to PDF). To read the document on its respective platform, all you need is the Acrobat Reader, which lists for $50, and is available for somewhat less from discount dealers. The PDF format allows the document to retain its original fonts. If those fonts aren't available on the receiving platform, Acrobat Reader creates a simulation, very close to the original in appearance. Acrobat Reader allows you to examine a document from a series of different views. You may set bookmarks to various pages, display the pages as thumbnails, or skip to specific sections of a document by selecting a hypertext button. (The buttons can be added by Acrobat Exchange program, once the document has been converted to the PDF format.)

The only drawback to this system is that the Acrobat Exchange (which allows you to create documents) and the Distiller (PostScript translator utility) are both considerably more expensive than the Reader. If you want to send a document around to your friends, they must each also license a separate copy of Acrobat Reader. It is not distributed free. Notwithstanding this, Acrobat is a significant milestone toward the goal of compatibility in personal computing. (Adobe Systems, Inc., 1585 Charleston Rd., Mountain View, CA 94039-2103)

Macintosh Software Review

KAI'S POWER TOOLS V2.0

Published By: HSC Software
List Price: $199; upgrades from v1.x are $49
Reviewed By: Matthew Leeds

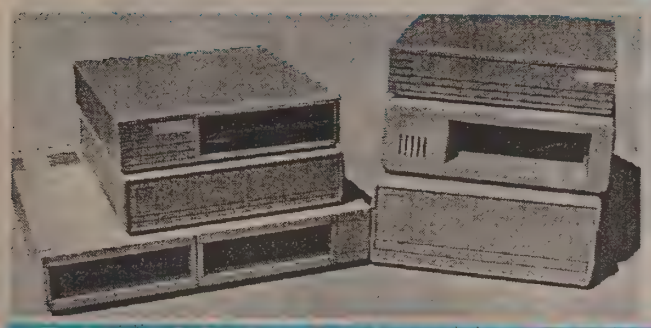
In case you've been living in a cave, if you use Photoshop you should get a copy of Kai's Power Tools (KPT). This is a set of thirty-three plug-in filters and extensions that dramatically extend the power and usefulness of Photoshop (as well as other Photoshop plug-in compatible applications like Painter, Premiere, Canvas, DeBabelizer, etc.). And just in case you don't own any of these programs, this new version comes bundled with MicroFrontier's ColorIt! 32-bit paint program that does support the plug-in architecture.

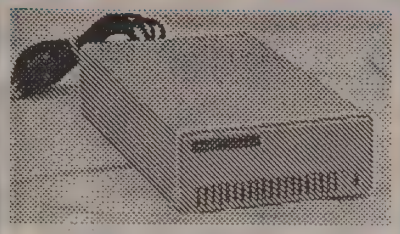
Version 2.0 adds a speed improvement; support for working directly in CMYK color space; real-time previews in the Gradient Designer, Texture Explorer, Fractal Explorer, and Gradients on Paths filter generators; and improvements to the user interface for the filter generators. In addition, once a texture, fractal, or gradient has been created, it can be applied to an image using one of several new operations, similar to the channel operations found in Photoshop. These new modes include Add, Subtract, Multiply, Screen, and Difference.

The included documentation is also much improved. The earlier manual was difficult to read, and difficult to use. In addition to the material in the manual, several additional documents are included on disc as is a slide show program. You also get a set of PICT files that demonstrate the effects you can get with KPT. (HSC Software, Inc., 1661 Lincoln Blvd., Suite 101, Santa Monica, CA 90404)

Continued on page 138

COMPUTER PARTS - SURPLUS ELECTRONICS - SERVICE PARTS - ACCESSORIES
SCHOOL & UNIVERSITY P.O.s ACCEPTED!
QTY. DISCOUNTS AVAILABLE*



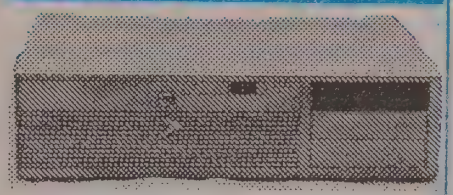


$19 - $65.00

•300W P/S
•5 HH Bays
•Kybd Lock
Custom built for Wang

$59.00

Fullsize Desktop Case



HOLDS FULLSIZE MOTHERBOARDS!

External Drive Enclosures • SCSI • CD ROM • Floppy

External Floppy Drive Case 1 FH/2HH....$19.00
External MFM/RLL Case & P/S $19.95
SCSI Case: Uses Apple 19 Pin floppy port for power. Quantum EPS type drive only!.....419.00
Open Face HH SCSI Case. Use for a SyQuest, Bernouli, CD-ROM, etc $45.00
Closed Face HH SCSI Case for 5.25/3.5" Drive. 30 Watt P/S.....$45.00
HH Case for 2 CD ROM drives. Side by side. 30 Watt P/S. No internal fan. Air Cooled. $45.00
FH Close Face SCSI Case & P/S for 1 Full Hight 5.25" drive or two HH drives.....$65.00
External CD ROM Drive case. 36 or 40 Pin. Specify CD Drive type. P/S and Fan $45.00

Power Supplies

Mini Tower Case Power Supply. 145 Watts. Refurbished.....$20.00
New $29.00
XT Power Supply. 135W ...$25.00
IBM XT 65Watt P/ S $5.00
300W. Tower or AT Type ...$49.00
AT Power Supply. 200W Refurb.....$29.00

Backup Tapes

DC2000 Tape (Gigatek brand) $12.00
DC600 Tape (Gigatek brand).....$9.00
GC9100 (1 Gig. Gigatrend tape)..$19.00

Floppy Drives

Used 360K 5.25" Drive $14.95
Used 1.2 Meg 5.25" HH $35.00
IBM PS/2 720K Drive OEM $59.00

Laptop Carry Case
15.5" x 12.5" x 2.75"

$19.95

Exterior pocket 13" x 9" x 1.5". Interior has positionable retainer and small "attache" panel for 3.5" disks, pens, papers. Padded case. Black with red highlights, carry handle, shoulder strap. Originally for Digital.

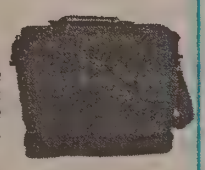
PS/2 25 Transport Case
13" x 16.5" x 16.5"

$19.95

Side keyboard pouch. Wheels & leash Can hold Mac LC or IIsi & Monitor, IIgs System, Small IBM System, or ?? Has 3 pockets inside. Rigid Bottom Side handles. Well Constructed!

Mini Tower Carry Case
16" x 16" x 7"

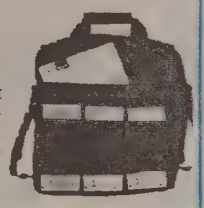
$14.95



Olivetti Carry case. Can be used to carry many different computer systems. Apple //e, Mac II, IIci & most Mini Towers Sturdy construction, heavy fabric, shoulder strap & handle. Blue color only.

Laptop Carry Case
12" x 15" x 2.75"

$19.95



Zippered Exterior pocket 12" x 12" x 1". Carry handles & Shoulder Strap. Greenish color. Originally for Mitsubishi.

Printers & Accessories

Epson FX 100.....$65.00
Epson FX286.....$75.00
Citizen GSX 130, 140, 140+ & 200GX Manual Sheet Feeder.
AH29804-0 NEW $24.95
Citizen GSX 130, 140, 140+ & 200GX Printer Stand.
AH29806-0. NEW $7.95

Cables & Connectors

DB25 IDC (Flat ribbon) conn. M/F..49¢
DB37 IDC (Flat ribbon) conn. M....49¢
IDE or Floppy (Flat ribbon).....$1. ea.
MFM/RLL/ESDI Cable Set.....$2.00
Power Y Cable. 4 Pin type.....$1.00
Power Extention 16". 4 Pin.....$1.00

Serial Link Cable

To link two computers for data transfer. Ends. Can be DB9 to DB9 or DB9 to DB25.....$9.95

Data-Trans

Transfer data between two computers at a high speed between two parallel ports.....$59.00

Chips & ROMs

80287-8.....$19.00
V20-8.....$2.00 V28-10.....$6.00
MC68030-16.....$39.00
MC68882-16.....$39.00
16550 (Enh.serial port chip).....$13.00
82450.....$3.00 8250.....$1.00

RAM

4116, 4164 or short lead 41256 -12 or -15 .....50¢
41024 (1 Meg x 1) or 44256 .....$3.00
256x8 -15 SIMM...$3.00 / -12.. .....$4.95
256x9 SIP -12. .....$5.95
256x9 SIMM -80.....$10.00

Batteries

1/2 AA size, 3.6V lithium.....$4.95
AT Type "plug in" 3.6V or 6V $6.95

EPROMs

2716 or 2732 .....75¢
2764.....$1.00
27128/27256.....$1.50
27512.....$2.00
271000 (32 Pin) $4.00
27010.....$6.00

Microcontrollers

8748.....$4.00
8749.....$6.00
8751.....$9.00

Alltech Electronics Co.

602 Garrison St. Oceanside, CA 92054
9-6 PM Mon.-Fri. - 9-5 PM Sat.

Phone Orders Only: VISA MasterCard
800/995-7773

3 Southern California Locations!
Santa Ana - Lomita - Oceanside
1300 E. Edinger. Santa Ana - 714/543-5011
All other Inquiries: 619/721-7733 2018 W. Lomita BLVD. Lomita - 310/539-2260
Fax: 619/721-2823 602 Garrison St. Oceanside - 619/721-7733
School & Govnerment POs Accepted! We Buy Surplus and unwanted computer items.

Power Supplies
Monitors • Modems
Cables • Parts
Service

Apple II
Service & Upgrades
Mac & IBM

Monitors

Open frame composite 9". B&W Monitor assebly. Build your own monitor 19.00

9" B&W Security Monitor. "Box" type with 75 Ω input $59.00

9" Composite "Box" type cabinet. Green screen. Good for security monitor. Input for 75Ω (standard) or High impedance.....$35.00

Color Composite Monitor. Not suitable for 80 column text but can be used for computer games, Nintendo, as a video monitor. Some have sound input also. Specify.....$69.00
Used/Refurbished Mono. DB9.....$35.00

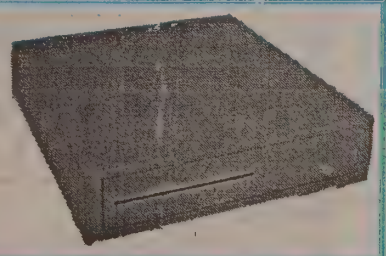
Refurbished System Specials

XT System Refurbished • Mono Monitor
360K Drive $95.00
AT System • Mono Monitor • 8 Mhz • 1024K
1.2M Drive $159.00
386 System • Mono Monitor • 20 Mhz • 4096K
1.44M Drive $349.00

Fujitsu Cash Drawer.

Hooks up to any receipt printer w/parallel I/O. RJ45 Has check "deposit" slot in front of drawer.

$75.00



Peripheral Cards

AT Floppy, Serial & Par Controller $9.95
MFM HD & Floppy Controller $14.95
AT IDE HD Controller $9.95
I/O Card 2 Serial & 1 Parallel $4.95
Mono/Parallel Port.....$9.95
Universal Video Card. 8 Bit C/E/VGA $39.00
Full Length CGA w/RCA out.....$14.95
EGA Card.....$29.00
101 Keyboard (NEW) $29.00
5 Pin kybd to PS/2 adapter $2.95
16 Bit Backplane board.....$10.00
Microsoft InPort Mouse Card (only).....$19.00
32 Bit Mem Exp. (9 Meg/0K) SiliconValley $20.00
Winning Wordperfect 5.1 in 5 hours! $9.95
AT 2 Meg Mem. Exp Card w/2 Meg $39.00
101 XT/AT Keyboard.....$29.00
101 AT Keyboard.....$19.00
Keyboard Wrist Pad.....$1.95
Slot Expanders (3,4 & 5 Slot, vertical) $9.95

CA Residents please add 7.75% Sales tax. • Minimum shipping & handling charges $5.00. (This covers most orders) • Warranty: Used/Refurbished products have a 90 day warranty • ALL Returns must have an RMA #, call before shipping back to us. • No Returns without an invoice. Shipping & Handling charges are non-refundable • 20% Restocking charge, applies to products purchased in error & incompatibility problems. School & University Purchase Orders accepted, others on AOC only. • Prices and availability subject to change at anytime without any notification whatsoever. • Some Products are refurbished product.

CD Titles IN STOCK

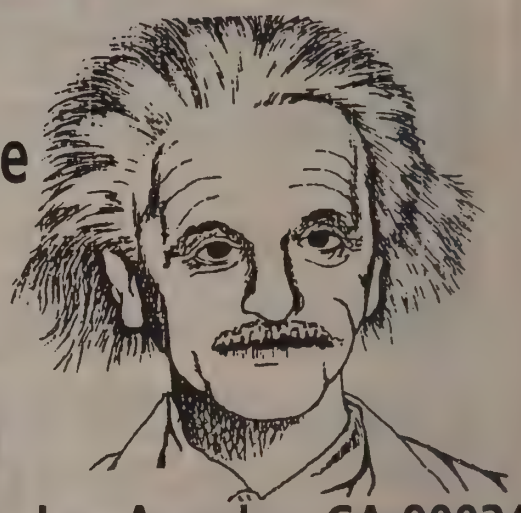
9 Digit ZipCode	16	Jones In The Fast Lane	13
7th Guest	30	Kodak Photo CD	12
American Business Phone Book 93/4	16	Kings Quest V	12
Atlas Pack (US & World)	15	Kings Quest VI	20
Animals	13	Languages of the World	17
Arthur's Teacher Trouble	16.40	Loom	14
Adventures	16	Legend of Kyranda	17
Art Appeal (ClipArt) 1	23	Last Dinosaur Egg	15
Art Appeal (ClipArt) 2	23	Mayo Clinic	15.50
Adventures In Heaven (Games)	15	Movie Directory Data Base	13
Architecture (Exploring Ancient)	22	Mozart	12
Battle Chess Enhanced	18	Midi Music Shop	13.50
Best of Micropros (Rail Road Tycoon, Greens, B17 Flying Fortress)	19	Mad Dog McCree	25
Best of Micropros (Rail Road Tycoon, Pirates, Rex Nebular Command HQ)	19	Mantis	11.50
Bibles and Religion	10	Manhole	19
Colossal CookBook	11.50	Monkey Island	13.75
ChessMaster 3000	14	Magic Death	23
Compton's Encyclopedia	17	MacMillian Dictionary	14
Compton's InterActive Encyclopedia	39	MPC Wizard 2.0	12
Compton's Family Choice	14.30	Mavis Beacon Teaches Typing	13.75
Conan the Cimmerian	16	Mario's Missing (DELUXE)	14
Composer Quest	20	Mixed Up Mother Goose	11.50
Computer Reference Library	10	Multimedia Mania	10
Day of the Tentacle	30	Marketing Master	12
DeskTop Imager	17	Microsoft Cinemania 94	53
Dinosaur Encyclopedia	16	MicroSoft ENCARTA 94	70
Dinosaur Safari	23	Multimedia Family Bible	19
Dictionaries & Language	10	Myst	47
Deathstar Arcade Battles	10	Nat. Geographic Mammals	15.50
Doctor's Book of Home Remedies	13	Newsweek InterActive	16
Dracula Unleashed	30	National Parks	14
Dr. Shareware	11	New Kid on the Block	36
Dr. Music	11	Ocean Below	14
Dr. Games	11	PC Signal	17
Dr. T's Sing Along	15	Prophone Nat'l Directory (Bus. & Res)	65
Dr. Windows	11	Publishers Paradise	19
Encyclopedia of Sound	10	Publishers Paradise Pro	27
Family Education Collection	18	Publish It 2.0	11
Family Doctor 3rd Ed	16	Quantum Gate	40
F15 Strike Eagle III	14.50	QuickToon	13
Gardening	10	Return to Zork	24
Gabriel Knight	25	Rom Material	12
Grolier's Encyclopedia 6.0	27	Return to the Moon	15
Game Collection	10	Sound Explorer	15
Gold Collection	10	SFX	13
Game Platinum	10	Spirit of Excalibur	15
Game Library	10	Secret Weapons of the Luftwaffe	13
Global Explorer	85	Starwars Chess	17
Graphic Works	20	Supertoon	13
Great Cities of the World Vol. 1 & 2	13	Straight from Heaven	10
Harry's Story Disk & Coloring Book	12.50	Space Shuttle	16
Indiana Jones	30	Street Atlas	85
Iron Helix	30	Travel Companion	14
JCSM Shareware Collection	10	Tempra Access	12
Jets & Drops	15	Techno Tools	10
Jutland	22	Timetable of History Business Politics & Media	15
		Timetable of History Science & Innovation	14
		U.S. Atlas Ver.4	12.50
		WildPlaces	12
		Worldview	12
		VideoCube	16
		NightWatch Interactive	30

FOR ADULTS ONLY

Doors of Passion	29	High Volume Nude	20
Digital Dancing	20	Art of Picking up Girls	15
Night Watch Interactive	30	Weekend at Ernies	30
Night Trips	30	Scissors and Stones	45
House of Dreams	30	After Dark Trilogy	25
Secrets	30	Amateur Videos	25
Seymore Butts	43	Come play With Me	35
Hidden Obsession	30	California Calendar Super Stars	30
Dream Machine	45	Best of the Best Vol. 1 or 2	30
Legends of Porn	20	Loads of Fun	25
My First Time	29	Deception	30
Wicked Whispers	25	Super Models go Wild	35
Girls of Mardigras	20	Squirt City	25
L.A. Strippers	30	Centerfold and Covergirls	25
Topless Dancer	20	Nova Collection Vol. 1 or 2	25
Princess of Persia	25	Words Best Breasts	20
Heidi's Girls	29	Sakura	20
Pinch of Pepper	30	Asian Palate	26
Massive Melons	30	Amorous Asian Girls	37
Deep Throat	28	Toys not Boys	25
The Devil in Miss Jones	28	Storm I or II	17
Debbie Does Dallas	28		
Moving Fantasies	15		
Girls of Stephen Hicks	20		
American Girls	20		

MANY MORE TITLES TO CHOOSE FROM !
IN STOCK CALL

EINSTEIN TECHNOLOGY



We Will Beat Any Price in This Publication

Tel: (310) 836-4441

Fax: (310) 836-6060

2812 1/2 S. Robertson Blvd., Los Angeles, CA 90034

Wholesale To The Public

★ EINSTEIN Multimedia Pack...$485
NEC CDR 510 3XI Triple Spin, Multisession
Mediavision 16 Bit Sound Card
Access Time: 195MS
Data Transfer Rate: 450KB/S

★ Professional Multimedia Pack ..$299
Sony 33A Double Spin, Multisession
Mediavision 16Bit Sound Card
Access Time: 300MS
Data Transfer Rate: 300KB/S

★ Classic Multimedia Pack.....$285
Mitsumi FX001-D Double Spin, Multisession
16 Bit Media Vision Sound Card
Access Time: 250MS
Data Transfer Rate: 350KB/S

★ Smart Multimedia Pack $319
NEC CDR-210 Double Spin, Multisession
Mediavision 16Bit Sound Card
Access Time: 320MS
Data Transfer Rate: 300KB/S

★ All of the above packages include one pair of Amplified Speakers and 11 Titles: U.S. Atlas-World Atlas-Mavis Beacon Teaches Typing-Chessmaster 3000-World Almanac-Concise Columbia Dictionary of Quotations-Hammond World Atlas-Rogets II-Bartlett's Familiar Quotations-American Heritage Dictionary-The Concise Columbia Encyclopedia

CD ROM

NEC CDR 510 3XI	$349
NEC CDR 210	160
Toshiba 3401B	300
Mitsumi FX001-D w/controller	150
Panasonic 562 Double Spin	147

MISCELLANEOUS

Midi Adapter	$18
80 Watts Amplified Shielded Speaker	65
Supra 14.4 Internal Fax Modem	119
Supra 14.4 External Fax Modem	145

Sound Cards

SoundBlaster Pro Deluxe	$79
SoundBlaster 16 Basic	99
SoundBlaster 16 MCD	140
SoundBlaster 16 MCD ASP	170
SoundBlaster 16 SCSI-2	160
SoundBlaster 16 SCSI-2 ASP	199
ProAudio Spectrum 16	99
ProAudio Studio 16	125
SoundBlaster Compatible	39

3% Cash Discount.

Symphony COMPUTERS™

PRIME COMPUTERS PERFECT PRICE

818.309.9345

Assembled In America

9620 E. LAS TUNAS DR. ● TEMPLE CITY ● CA 91780

Special!

14" SHAMROCK
Monitor
1024 X 768.28 dpi
NON-INTERLACED
$239

MONTHLY SUPER SPECIAL

WD 420MB 12MS IDE HD	$275
WD 540MB IDE HD	$395
Mini Tower Case w/PS	$37
Mid. Size Tower Case w/PS	$57
Viewsonic 15E 15" NI . 28	$345
Viewsonic 15 15" NI . 28	$425

INFINITY-2000™
ISA BUS SERIES 486 & 386

- MOTHERBOARD w/ CPU
- 128K FastCache
- 4MB RAM Installed
- Teac 1.2MB & 1.4MB Drives
- WD 250MB IDE Hard drive
- Super VGA Card 512K (16Bit)
- 14" Super VGA Color Monitor .39
- IDE Controller 2HD & 2FD w/2S, 1P, 1G port
- Mini Tower Case w/Power Supply
- Chicony 101 Enhanced Keyboard
- MS Dos 6.2 Manual w/ Diskettes

INTEL 486DX2 - 66 (256K Fast cache .28 NI)	$1298
INTEL 486 DX - 50 (256K Fast cache . 28 NI)	$1248
INTEL 486DX -33 (256K Fast cache . 28NI)	$1098
CYRIX 486DLC - 40 (W/ Math Coprocessor)	$898
AMD 386DX - 40	$ 798

INFINITY-2000™
VESA LOCAL BUS SERIES 486DX VESA

- 486 VL BUS MOTHERBOARD
- Intel 486DX Processor
- 256K Fast Cache
- 4MB RAM Installed
- Teac 1.2MB & 1.4MB Drives
- WD 420MB 14MS IDE Hard Drive
- 32 Bits VLB Windows Accelerator w/1MB
- 32 Bits IDE Controllor . w/ 2S,1P,1G port
- 14" NON-INTERLACED Super VGA Color Monitor .28
- Mid. Tower Case power supply
- Chicony 101 Enhanced KeyBoard
- MS Dos 6.2 Manual w/ Diskettes

BASIC III 486DX2-66	$1398
BASIC II 486DX-50	$1348
BASIC I 486DX-33	$1198

INFINITY-2000™
SUPER BUS LEVEL SERIES GENOA VESA

- GENOA 486DX MOTHERBOARD
- PENTIUM OVER DRIVE P24T SOCKET
- Intel 486DX Processor
- 256K FAST CACHE
- 4MB RAM Exp. to 32MB
- Teac 1.2 MB & 1.4 MB Drives
- WD 420MB 14MS IDEHard Drive
- 32 Bits IDE Controllor . w/ 2S,1P,1G port
- GENOA 32 Bits VLB Windows Accelerator w/1MB (provides 16 million Colors)
- 14" NON-INTERLACED Super VGA Color Monitor .28 (Border-less Display)
- Mid. Tower Case power Supply
- Chicony 101 Enhanced Key Board
- MS Dos 6.2 Manual w/ Diskettes

Level III 486DX2-66	$1458
Level II 486DX-50	$1408
Level I 486DX-33	$1258

INFINITY-2000™
SUPER BUS PRO SERIES GENOA VESA

- GENOA 486DX MOTHERBOARD
- PENTIUM OVER DRIVE P24T SOCKET
- Intel 486DX Processor
- 256K FAST CACHE
- 8MB RAM Exp. to 32MB
- Teac 1.2 MB & 1.4 MB Drives
- WD 420MB 14MS IDEHARD DRIVE
- 32 Bits IDE Controllor . w/ 2S,1P,1G port
- GENOA 32 Bits VLB Windows Accelerator w/1MB (provides 16 million Colors)
- NEC 15" MULTISYNE FLAT SQUARE SCREEN MONITOR
- Mid. Tower Case Power Supply
- Focus 2001 Enhanced Key Board
- MS Dos 6.2 Manual w/ Diskettes

Pro III 486DX2-66	$1998
Pro II 486DX-50	$1948
Pro I 486DX-33	$1798

Motherboards

ISA Bus

386SX - 40MHZ w/ CPU $65
386DX - 40MHZ w/ CPU & 128K $95
486DLC - 40MHZ w/CPU & 128K w/ Math coprocessor... $165
486DX - 33/50/66 - w/256K No CPU $85

VESA Local Bus

486DX - 33/66MHZ w/256K Cache No CPU..... $85
GENOA 486DX VESA w/256K 24T SOCKET..... $125
IBM 486SLC2-50 VESA w/64K w/CPU $275
IBM 486SLC2-66 VESA w/64K w/CPU $295

CD ROM Drives

Toshiba 3401B (Double Speed 200MS, 330K/S) $325
Panasonic CR-562B (Double Speed 320MS, 300K/S)..... $175
Nec 510 (Tripple Speed, 195MS, 450K) $365

Video Display Card

SUPER VGA CARD W/512K $35
SUPER VGA CARD W/1MB $57
GENOA 8500 WINDOWS ACCERATOR VLB w/1MB $90
GENOA 8600 WINDOWS ACCERATOR VLB w/1MB $125
ORCHID FAHRENHEIT 1280 VLB w/1MB $155
ORCHID FAHRENHEIT 1280 VLB w/2MB $195
DIAMOND VIPER VLB3 w/2MB $345
OTHER CARDS ..... $CALL

Keyboards

MITSUMI 101 ENHANCED $16
FUJITSU 101 ENHANCED..... $38
CHICONY 101 ENHANCED $16
FOCUS 2001 ..... $38
FOCUS 9000 ..... $58
OTHER KEYBOARDS ..... $CALL

INFINITY-2000™
MULTIMEDIA POWER SERIES 486DX VESA

- 486 Vesa Local Bus MotherBoard (3 Vesa Slots) w/Pentium Overdrive P24T socket ready
- INTEL 486DX PROCESSOR
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- 4MB RAM exp. to 32MB
- TEAC 1.2MB Drive & 1.4MB Drive
- Western Digital 420MB IDE Hard Drive
- 32 Bits VLB Windows Accelerator w/1MB
- 32 Bits VLB IDE Controller w/ 2S / 1P / 1G
- 14" Non-Interlaced SVGA Color Monitor .28 (Border-Less Display)
- Medium Tower Case w/Power Supply
- Chincony 101Enhanced Key Board
- Hi - Res. mouse
- MS Dos 6.2 & Win 3.1 w/ Manual & Diskettes
- PANASONIC CR-562 (DOUBLE SPEED) & SOUND BLASTER 16 W/15 WATTS SPEAKERS
- Encyclopedia, Typing, Animal, Chessmaster 3000, U.S. Atlas, World Atlas.

Media Power III 486DX-66	$1798
Media Power II 486DX-50	$1748
Media Power I 486DX-33	$1598

INFINITY-2000™
MULTIMEDIA SUPERIOR SERIES 486DX VESA

- 486 Vesa Local Bus MotherBoard (3 Vesa Slots) w/Pentium Overdrive P24T socket ready
- INTEL 486DX PROCESSOR
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- 4MB RAM exp. to 32MB
- TEAC 1.2MB Drive & 1.4MB Drive
- Western Digital 420MB IDE Hard Drive
- 32 Bits VLB Windows Accelerator w/1MB
- 32 Bits VLB IDE Controller w/ 2S / 1P / 1G
- 14" Non-Interlaced SVGA Color Monitor .28 (Border-Less Display)
- Medium Tower Case w/Power Supply
- Chincony 101Enhanced Key Board
- Hi - Res. mouse
- MS Dos 6.2 & Win 3.1 w/ Manual & Diskettes
- TOSHIBA XM-3401B (DOUBLE SPEED) & PRO AUDIO SPECTRUM 16 W/ 15 WATTS SPEAKERS
- Encyclopedia, Typing, Animal, Chessmaster 3000, U.S. Atlas, World Atlas.

Media Superior III 486DX2-66	$1998
Media Superior II 486DX-50	$1948
Media Superior I 486DX-33	$1798

INFINITY-2000™
MULTIMEDIA SUPREME SERIES 486DX VESA

- 486 Vesa Local Bus MotherBoard (3 Vesa Slots) w/Pentium Overdrive P24T socket ready
- INTEL 486DX PROCESSOR
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- 4MB RAM exp. to 32MB
- TEAC 1.2MB Drive & 1.4MB Drive
- Western Digital 420MB IDE Hard Drive
- 32 Bits VLB Windows Accelerator w/1MB
- 32 Bits VLB IDE Controller w/ 2S / 1P / 1G
- 14" Non-Interlaced SVGA Color Monitor .28 (Border-Less Display)
- Medium Tower Case w/Power Supply
- Chincony 101Enhanced Key Board
- Hi - Res. mouse
- MS Dos 6.2 & Win 3.1 w/ Manual & Diskettes
- NEC 510 (TRIPLE SPEED) & PRO AUDIO SPECTRUM 16 W/ 80 WATTS SPEAKERS
- Encyclopedia, Typing, Animal, Chessmaster 3000, U.S. Atlas, World Atlas.

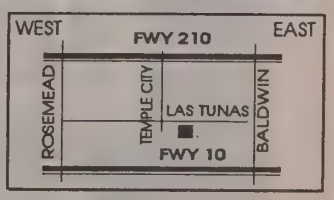
Media Supreme III 486DX2-66	$2148
Media Supreme II 486DX-50	$2098
Media Supreme I 486DX-33	$1948

Symphony COMPUTERS™

NORTHERN CALIFORNIA BRANCH
3460 EDWARD AVE.
SANTA CLARA, CA 95054
TEL. (408) 980-8325
FAX. (408) 980-8327

SOUTHERN CALIFORNIA HQ
9620 E. LAS TUNAS
TEMPLE CITY, CA 91780
TEL. (818) 309-9345
FAX. (818) 309-7579

- ☐ SUPERIOR QUALITY CONTROL
- ☐ FREE LIFE TIME HARDWARE TECHNICAL SUPPORT
- ☐ FINANCING & LEASING AVAILABLE



Store Hours: MON. - FRI. 9:00AM - 6:00PM, SAT. 10:00AM - 6:00PM (SOUTHERN)

Price, terms, availability subject to change w/out notice. Not responsible for typo.

MS5112

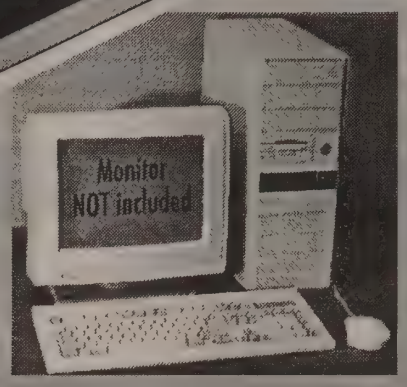
SPECIALS

SOFT TECH • SOFT TECH • SOFT TECH • SOFT TECH

60 Mhz PENTIUM

$1,999.00*

8 MB RAM
256 K Cache
420 MB IDE Hard Disk
PCI IDE Disk Controller
1.44 MB Floppy
2 Serial, 1 Parallel, 1 Game
PCI SVGA w/1MB VRAM
MidTower w/250 W UL P.S.
101-key Enhanced Keyboard
MS Compatible Mouse

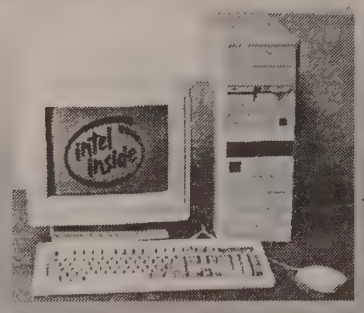


MOTHER BOARD SPECIFICATIONS
3 PCI (64 bIT) & 5 EISA slots
up to 192 MB RAM
up to 512 K Cache
Intel chip set

486DX2-66 VESA

$1,298.00*

INTEL CPU w/Cooler fan
4 MB RAM / 256K Cache
245 MB IDE Hard Disk
1.2 MB & 1.44 MB Floppy
2 Serial, 1 Parallel, 1 Game
32 BIT VESA Windows Accelerator
Paradise "Rocket Chip"
14" .28 dp SVGA Monitor
MidTower w/250 W UL P.S.
101-key Enhanced
MS Compatible Mouse



486SLC-33

$748.00*

170 MB Hard Disk
4 MB RAM
1.44 MB Floppy Drive
2 Serial, 1 Parallel, 1 Game
SVGA Card
14" SVGA Monitor
MiniTower w/230 W UL P.S.
101-key Enhanced K.B.
MS Compatible Mouse

MultiMedia CD

$299.00*

Sound Blaster 16
Panasonic
Dual Speed CD ROM
6 CD Titles
- Multimedia Encyclopedia
- The Animals
- Chessmaster 3000
- US Atlas
- World Atlas
- Beacon Teaches Typing

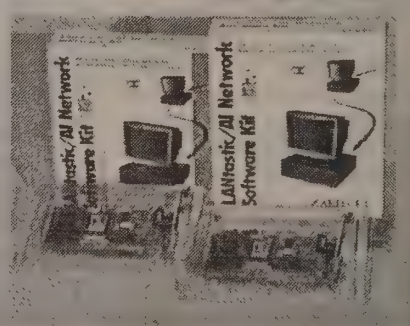
Amplifier Speakers

LANtastic Ver. 6.0

$199.99*

Two copies of
LANtastic AI Network
Single Node Software

Two 16 Bit NE 2000
compatible
Network Cards



COMPONENTS

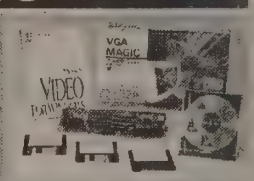
Micropolis 2210 1.2 GB, 10 ms SCSI II H/D	$740.00*
Micropolis 2217 1.7 GB, 10 ms SCSI II H/D	$1025.00*
420 IDE MB H/D	$279.00*
Adaptec 1542 SCSI Cont. Bus Mastering	$179.00*
Adaptec 1522 SCSI Cont.	$75.00*
Hi-Speed I/O (2 HS Serial, 1 Parallel)	$25.00*
VESA LB IDE w/HiSpeed I/O	$49.00*
Colorado 250 MB Tape B/U	$148.00*
MicroSoft Mouse Ver. 2.0	$35.00*
Sound Blaster Pro	$85.00*
Sound Blaster 16 basic	$109.00*

MICRO VIDEO

Micro Converter
Converts VGA to TV
$149.00*

Micro Video w/Video for Windows
Captures Video from your VCR or CamCorder
$299.00*

TV tuner $99.00*
Puts a TV inside your computer.



VGA MAGIC
Paradise "Rocket Chip"
VESA Local Bus Video Card
with 1MB RAM &
MicroSoft Video for Windows
$149.99*

SOFT TECH COMPUTERS

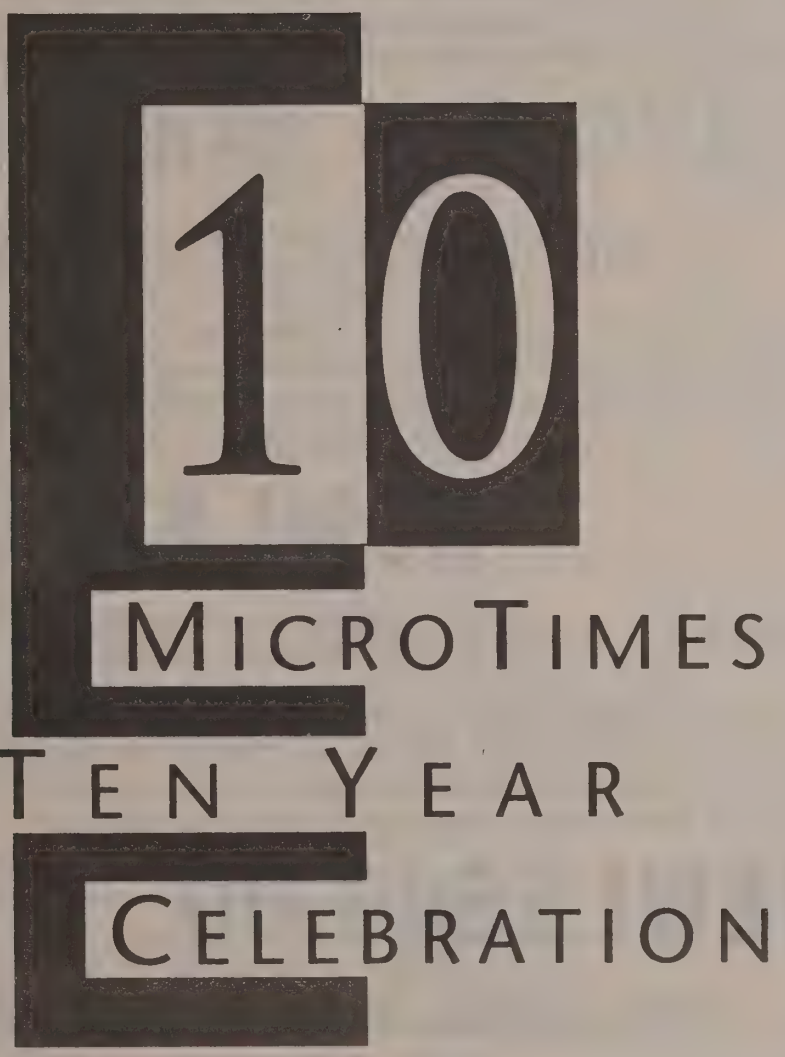
980 E. Orangethorpe Ave., #C
Anaheim, CA 92801 · Near Raymond

* With 3% CASH Discount

VISA MasterCard

(714) 680-9829

It only happens once a decade.



Coming in **May 1994** watch for an exciting new look wrapped around the same **great editorial** you've found in ***MicroTimes*** **month after month** since 1984.

Join us for a look back on the last ten years in the **computer industry** and a peek at what industry visionaries see coming up in the **next ten**.

MICRO CITY℠

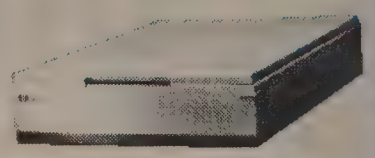
COMPUTER SUPERSTORE

THINK AHEAD IN '94!

HEWLETT PACKARD
Authorized Dealer

BUY THE HP SCANJET IIP SCANNER AT A NEW LOW PRICE AND GET A SUPER BONUS — FREE OCR SOFTWARE!

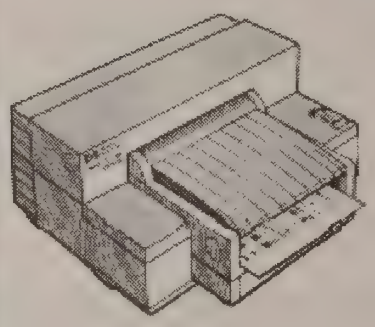
HP SCANJET IIP SCANNER



Think Ahead! HP makes scanning and document imaging affordable with their new low price on the ScanJet IIp Scanner. Featuring an optical resolution of 300dpi, plus a high quality 1200dpi enhanced grayscale resolution, the ScanJet IIp is the perfect solution for capturing text and graphics. The built-in DeskScan II software makes scanning easy and efficient and features HP AccuPage 2.0 technology for greater OCR accuracy. In addition to the free image-editing software enclosed with this scanner, ***HP is now offering free Calera® WordScan® OCR software with the ScanJet IIp!*** All for only:

NEW LOW PRICE! $479.00! FREE OCR SOFTWARE

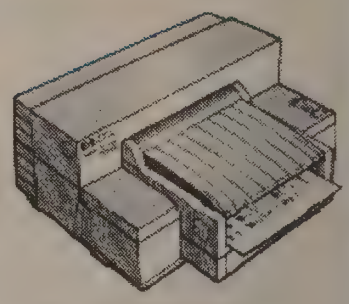
HP DESKJET / DESKWRITER 520



Think Ahead! HP's new DeskJet / DeskWriter 520 features 600 x 300 dpi printing for clear, sharp, professional-quality documents, plus HP's Resolution Enhancement technology for smoother, sharper text and graphics. Comes with the industry-leading 3-year warranty, plus HP's reputation for quality and reliability. This affordable new printer is the perfect solution to put you *ahead*!

NEW! $279.00

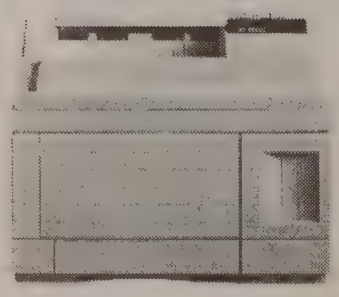
HP DESKJET / DESKWRITER 560C



Using an advanced color printing system with HP's exclusive built-in ColorSmart technology, the new DeskJet / DeskWriter 560C delivers optimal color output. With resident dual cartridges for convenient black-and-color printing at the same time, clear 600 x 300 dpi black printing, and a variety of internal and scalable fonts, this new color printer is years *ahead* of its counterparts!

NEW! $549.00

HP LASERJET 4 / 4M LASER PRINTER



True 600 dpi technology with a fast 8 page-per-minute(ppm) print engine that prints most 600 dpi documents at 300 dpi speeds. This quickness can be attributed to the LaserJet 4's fast RISC processor and I/O, making printing complex graphics a breeze! Add to this 45 internal scalable typefaces and 2MB of standard memory (expandable to 32MB), and it's easy to see:the LaserJet 4 is *Ahead* of it's time!

$1349.00!

ALL ADVERTISED HP PRICES REFLECT A 2% CASH DISCOUNT

CERRITOS
[illegible]
(714) 739-0444
FAX (714) 739-8291

SAN JUAN CAPISTRANO
[illegible]
(714) 489-0226
FAX (714) 489-0501

VAN NUYS
[illegible]
(818) 781-0688
FAX (818) 781-4203

SAN DIEGO
[illegible]
(619) 552-9355
FAX (619) 552-9018

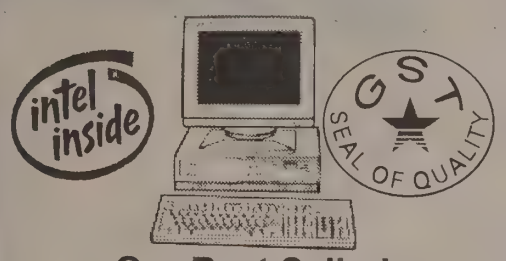
HOURS: M-F 9:00 - 6:00 SAT 10:00 - 5:00 [illegible]

"ALL PRICES REFLECT A 2% CASH DISCOUNT" "ASK ABOUT MICRO CITY'S REVOLVING CREDIT PLAN" "MASTERCARD & VISA ACCEPTED"
Stock may not be available in some stores – Prices subject to change without notice – Prices good thru May 15th, 1994

MICRO CITY
COMPUTER SUPERSTORE

THINK AHEAD IN '94!

GST 486DX/33MHz VESA LOCAL BUS



Our Best Seller!

This Complete System Comes With:

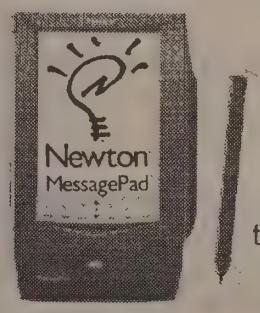
- 4MB RAM
- 245MB Hard Drive
- 256K Cache Memory
- VL IDE Controller with I/O
- 1.2M & 1.44M Floppy Drive
- 2 Serial / 1 Parallel port
- SVGA Monitor .28 w/ VLB SVGA Video Card w/1MB
- 101 Enhanced Keyboard
- MS DOS 6
- MS Windows 3.11
- Mouse

$1399.00!

APPLE® NEWTON® MESSAGEPAD™ 110

Authorized Dealer

WE ARE NEWTON KNOWLEDGEABLE!



This new second member of the Newton family of products features more than three times the memory and twice the battery life of the original MessagePad! With its improved handwriting recognition and fax, e-mail, and paging capabilities, this new digital assistant can help you manage your information and stay organized! If you bring in this ad, we'll give you a special price of only

$549.00!

PRICE IS GOOD WITH AD ONLY!

Apple, the Apple logo, and Macintosh are registered trademarks of Apple Computer Inc. — Newton MessagePad is a trademark of Apple Computer Inc.

CD SPECIALS!

GST MEDIASTAR MULTIMEDIA UPGRADE KIT

GST is pleased to announce the introduction of our own line of affordable MultiMedia Upgrade kits. Each kit comes complete with:

MediaStar

- Panasonic Double-speed internal CD-ROM drive
- Creative Labs SoundBlaster Sound Card
- 4 CD-ROM Titles
- Software utilities and Cables

MediaStar Kit # 1
w / SoundBlaster 16 MultiCD Sound Card
$399.00

MediaStar Kit # 2
w / SoundBlaster 16 Basic Sound Card
$319.00

MediaStar Kit # 3
w / SoundBlaster Pro Deluxe Sound Card
$295.00

CREATIVE LABS DISCOVERY 16 MULTIMEDIA UPGRADE KIT

- Double-speed internal CD-ROM Drive
- SoundBlaster 16 Basic Sound Card
- Software and speakers
- 4 CD-ROM Titles

$319.00

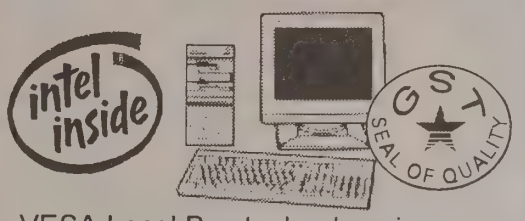
EPSON ACTIONNOTE 486SLC2/50MHz NOTEBOOK

If you're constantly on-the-go or in need of a tele-commuting solution, you're going to want a portable computer that's not going to cost you a fortune. Think Ahead! Weighing only 5.5lbs, this full-featured powerhouse 486SLC2/50MHz unit comes with 4MB RAM, a 120MB Hard Drive, a Logitech Trackball, a data/fax modem, Windows and DOS, its own carrying case, and a one year onsite warranty! All of this for only

$1549.00

The Intel Inside Logo is a registered trademark of Intel Corporation

GST 486SX/33MHz VESA LOCAL BUS



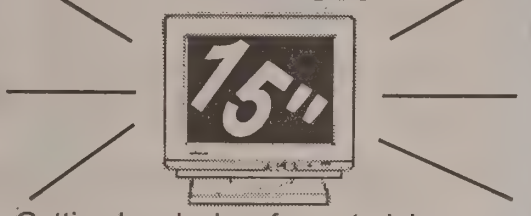
VESA Local Bus technology improves your video and hard drive speeds compared to ISA bus machines. With upgradability in mind, this is the perfect entry level VESA machine!

Comes with:

4MB RAM — 245MB Hard Drive — 64K Cache Memory — VL IDE Controller — 1.2M Floppy Drive — 2 Serial / 1Parrallel port — Diamond Speedstar Pro Video Card w/1MB — SVGA Monitor .28 — 101 Enhanced Keyboard

$1129.00!

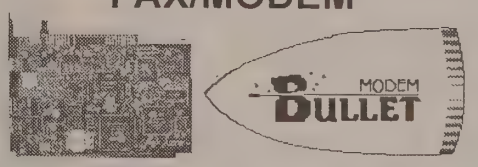
EVERVIEW 15" SVGA MONITOR



Getting headaches from straining your eyes, or in need of a monitor upgrade that won't break the bank? Stop squinting and increase your viewing area with this affordable 15" SVGA monitor from Everview

$349.00

E-TECH BULLET FAX/MODEM



Send and receive data and faxes at speeds up to 14,400 bps with E-Tech's internal high-speed Bullet Fax/Modem. Featuring v.42 data compression and error correction, plus Class 2 fax command set. Comes with cables and Quick Link II software for DOS and Windows. If you bring in this ad, we'll give you the great price of

$95.00

PRICE IS GOOD WITH AD ONLY!

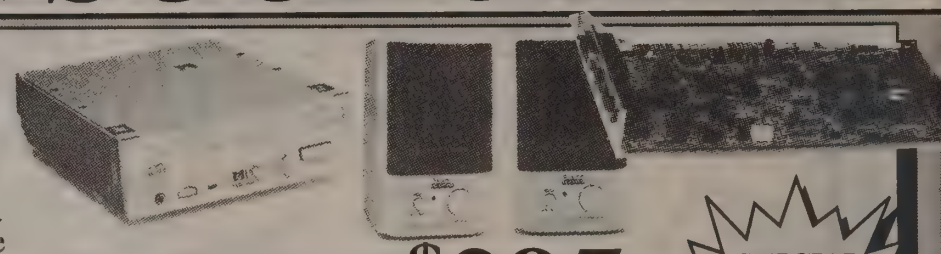
CITIZEN Tandon AST EPSON intel EVEREX

YOUR FINAL SOURCE FOR

DISCOVERY CD 8

SETTING THE STANDARD FOR SOUND & MULTIMEDIA

SoundBlaster™ Pro is the stereo sound standard for multimedia computing. Combined with a high-performance CD-ROM drive and an array of educational and entertaining software, the Discovery CD Upgrade Kit opens the door to a whole world of new and exciting multimedia applications.



SOUND BLASTER PRO

The industry standard in stereo sound with specifications and features that will keep you satisfied for years.

- Compatible with thousands of Sound Blaster programs
- 8-bit stereo sampling and playboack from 4kHz to 44.1 kHz
- 20-voice, 4-operator OPL-3FM synthesizer for a larger choice of instrument sounds & effects - and with greater fidelity than ever before
- Microphone, stereo line-in, and CD audio interfaces provide multiple inputs for your recordings

STEREO SPEAKERS

- Matched pair of high performance stereo speakers from Creative Labs.

MIDI INTERFACE

- Sound Blaster compatible

JOYSTICK PORT

- Standard PC port for 1 or 2 joysticks (optional splitter cable available)

$295

SPECIAL OFFER! LIMITED QUANTITY!

STEREO AMPLIFIER AND MIXER

- 4-watts-per-channel (PMPO) amplifier to power speakers or headphones
- Built-in mixer lets you mix up to five audio sources plus control master volume output
- Full control of fade-in and out, pan, volume, left/right steering, and microphone mixing

HIGH-QUALITY CD-ROM DRIVE

- Co-Developed by Creative Labs and Panasonic with a proprietary interface, this drive guarantees high performance and compatibility. Exceeds MPC specifications.
- 540 MB data capacity ..... • 64KB RAM buffer
- 150KB/sec data transfer rate .. • 390ms access rate
- Photo CD compatible—view first session Photo CD's on your CD-ROM drive with third-party access software (ask your reseller about available software)

MACINTOSH

180 Power Book 180C ..CALL
165 Power Book 165C ..CALL

Quadra 840AV

8/230 3299
8/230w/CD 3599
16/500 4099
16/500C 4359

SuperMac

Super M17" 999
Super M 20T 2399
Thunder 24 2145
Spectrum 785

Quadra 650

8/230 2199
8/230w/CD 2499
8/500 2799
8/500/CD 3099

MAC Monitors

RGB 14" 495
RGB 14" AV 695
RGB 16" 949
MAC 21" 2849

Quadra 605 Newton

4/80 .....$949
8/150 1199

250 Power Book Duo 270C

4/200 2329
12/200/W 2899
4/240 2899
12/240/W 3359

Quadra 950

8/500 4199
8/!Gb 5199
8/0 3199
8/230 3699

Quadra 610

8/160 1359
8/230 1729
8/230/CD 2049
8/500/CD 2399

Scanners

UMAX 840 1269
MicroTeck IIXE 1075
Apple One Scanner 769
CLR One Scanner 969

Laser Printers

Select 310 849
Select 360 1529
Laser Pro 810 4399
Laser Pro 630 1999

Quadra 660 AV

8/230 2159
8/230/CD 2399
8/500 2699
8/500/CD 2699

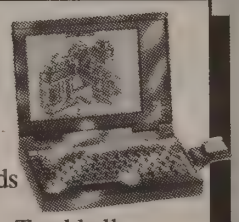
Parallel Port TB
525MB EXT.....$799

Parallel Port Ext. CD ROM
(Single Speed) $399

Parallel Port Ext. CD ROM
(Dual Speed) $499

Phillips (LMSI) IDE INT.
KIT (Complete) $99

TEXAS INSTRUMENTS TM4000/4000E NOTEBOOKS



- Less than 6 Pounds
- 4 or 8MB RAM
- DOS & Windows, Trackball

CPU	Screen	HD	Price
486SX/25	Mono	120MB	$2099
486DX2/50	Mono	200MB	$2699
486DX2/40		200MB	$3099
8MB RAM, Passive Color			
486DX2/50		200MB	$3899
4MB RAM, Active Color			

Please Call For DeskTops. Lease as low as $65/mo

TOSHIBA

Authorized Dealer

T1900/T1900C

486SX-20, 4MB, PCMICA, 6.4lbs., DOS 6.0, WIN, Ballpoint
120MB/200MB .1499/1629
T1900C 120MB 2099
T1900C 200MB 2299

1950CS/1950CT

486DX2-40, 4MB RAM, DOS, Windows, Trackball
1950CS 120/200...2499/2695
1950CT 120/200 .....CALL
1950CT Active MatrixCALL

T4600/T4600C

486SI-33, 4MB, PCMICA, 6.4lbs., DOS 6.0, WIN, Trackball
120MB/200MB $2569/2669
T4600C 120MB Color .3969
T4600C 200MB Color ..Call
T4600C 340MB Color ..Call

Portege T3400/GT .....CALL
486SX-25, 4MB, LCD, or Active

T4700CT, T4700CS....CALL
486DX2-40, 8MB Ram, LCD, or Active

Dynapad T100X 40HDD 2599
386SXLV-25, Pen Point Ready

T6600C 510MB 5975
486DX2-66, 8MB Ram, Active Matrix

T6600 C/CD 510MB 6635
486DX2-66, 8MB, CD Installed

T6600 C/CDV 510MB 7499
486DX2-66, 8MB, CD, Ethernet

COMPUTER BUSINESS CENTER

MON-FRI
8:30-6:00
SAT:10-4

• BUENA PARK •
6800 Orangethorpe Ave. #A
(714) 562-0268 • FAX (714) 562-0269

Prices Subject to change w/out notice. Financing & Leasing Available. EASY QUALIFYING! ****PM=Per Month

Seagate NEC COMPAQ HEWLETT PACKARD IBM TOSHIBA

COMPUTER SOLUTIONS

CAF TECHNOLOGY 386-40 MHz

FCC CLASS B & NOVELL APPROVED
- 80386-40MHz 64k Cache Motherboard
- 4MB RAM Expandable to 32MB
- Mini Tower Case/Power Supply
- IDE (Hard/Floppy) Control
- TEAC 1.2 MB Floppy Drive
- TEAC 1.44 MB Floppy Drive
- 80MB Hard Disk
- Serial/Parallel/Game Card
- Super VGA 1024x768 Monitor & 1MB Card
- 101 Keyboard

$1095 or $59.27 PM

CAF TECHNOLOGY 486-33 MHz

FCC CLASS B & NOVELL APPROVED
- 80486-33MHZ 64K Cache Motherboard
- 4MB RAM Expandable to 32MB
- Desk Top
- IDE (Hard/Floppy) Control
- TEAC 1.2MB Floppy Drive
- TEAC 1.44MB Floppy Drive
- 120MB Hard Disk
- Serial/Parallel/Game Card
- Super VGA 1024x768 Monitor & 1MB Card
- 101 Keyboard

$1450 or $78.48 PM

HEWLETT PACKARD

HP 4w/Toner	$1349
HP4M w/Toner	1849
HP 4L w/Toner	669
HP 4L M w/Toner Compl	999
4SI w/Toner	2975
HP II w/AT CTRL	699
HP IIC w/AT CTRL	1239
DeskJet 500	309
DeskWriter	309
DeskJet Portable	375
DeskJet 500C	489
DeskWriter C	489
DeskJet 550C	579
DeskWriter 550C	579
PaintJet XL-300	2179
DeskJet 1200C	1399

ViewSonic®

SVGA Monitors

ViewSonic 6E 14" NI (.28dp)	$320
ViewSonic 5E 14" NI (.28dp,72Hz)	399
ViewSonic 15 15" Digital FST (76Hz)	500
ViewSonic 17 17" Digital FST (76Hz)	1048
ViewSonic 20 20" Digital (.28dp,76Hz)	1668
ViewSonic 21 21" Digital FST (.26dp)	1893

NEC

Authorized NEC Dealer

NEC 3FGE	$595
NEC 4FGE Free Lens	715
NEC 5FGE Free Lens	1095
NEC 5FG	1265
NEC 5FGP	1385
NEC 6FGP	2395

EPSON

AUTHORIZED DEALER

LX-810, 9 Pin	$179
LQ-570+, 24 Pin	275
FX-870/FX117	279/369
LQ-870/LQ-1170, 24 Pin	449/609
LQ-1070 24 Pin, 132 Col.	395
LQ-2550 24 Pin, High Speed	899
DFX-5000 9 Pin, 533 CPS	CALL

• LASER •

Actionlaser 1500, 6PPm	$689
EPL-8000 Laser, 10PPm, 1MB	899

All Accessories Available

CITIZEN

Authorized Sales/Service

GSX 190 NEW	$179
GSX 240 NEW	309
GSX 130	275
GSX 145, 132 COL	409
200GX, 9 Pin	169
Color Option	49/69

CANON Bubble Jet

BJ-10EX Printer	$259
BJ-300 80 col, 600cps	359
BJ-330 132 col, 600cps	595
BJ-200 360dpi	309
BJC-800/820 Color	1889/1995

OKIDATA PRINTERS

Authorized Dealer

320/321	$319/429
Oki 520/521	379/495
390/391	429/585
Oki 590/591	439/589
Oki 400E 4ppm w/ Toner	519
Oki 810 8ppm w/Toner	899
Oki 830 8ppm	1079
Postscript, 35 Fonts, 2MB RAM	
Oki 850 8ppm	1259
2MB, Postscript, Apple Talk	

COLORADO

MEMORY SYSTEMS INC.

Internal 120MB	$119
Internal 250MB	189
Trakker 120MB	299
Trakker 250MB	349

IBM

Value Point

Authorized Dealer

486SX/33 120/245, 3x3 SVGA Mtr;	1695/2095
486DX/33 120/245, 3x3 SVGA Mtr.	2095/2295
486DXII/66 245/240, 5x5 SVGA Mtr.	2795/2995

All PS/2 Lines Available!

386DX 40MHZ

W/64K Cache Barebones

- Mini Tower Case
- 40 MHz 386 MB W/64K CACHE
- 1.2 Or 1.4 MB Floppy Drive
- Hard & Floppy Controller IDE
- 101 Key Keyboard
- Clock/Calendar
- 200 Watt Power Supply
- 2 Serial Ports/ 1 Printer Port/Game

$299

LIMITED QUANTITY

- **COLORADO 120MB INTERNAL TAPE DRIVE $119**
- TAX FONT HP LASER FAMILY $69
- LOGIC TECH MOUSE $26
- POCKET SIZE MODEM, 1200 BAUD $20
- SEND/RECEIVE FAX MODEM, INTERFACE (14.4 SB, 14.4 MODEM) $199

486DX 33MHZ

W/256K Cache Barebones

- Mini Tower Case
- 33 MHz 486 MB W/256K CACHE
- 1.2 OR 1.4MB FLOPPY DRIVE
- HARD & FLOPPY CONTROLLER IDE
- 101 KEY KEYBOARD
- CLOCK/CALENDAR
- 200 W POWER SUPPLY
- 2 SERIAL PORTS/ 1 PRINTER PORT/GAME

$595

386SX/40MHz

BAREBONES

- MINI TOWER CASE
- 40 MHz 386SX MB
- 1.2 OR 1.4 MB
- FLOPPY DRIVE
- HARD & FLOPPY
- CONTROLLER IDE
- 101 KEY KEYBOARD
- CLOCK/CALENDAR
- 2 SERIAL PORTS/ 1 PRINTER PORT/GAME

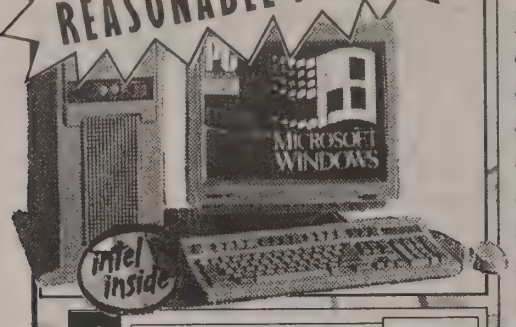
$245

• SANTA MONICA •
2811 Ocean Park
(310) 452-2027 • FAX (310) 452-5548

• SIMI VALLEY •
2139 Tapo Street #10
(805) 584-8307 • FAX (805) 584-8379

PERFORMANCE AND PRICE...

WE WILL MATCH ANY REASONABLE PRICE!



BARE BONE SYSTEMS

Includes: Mini Tower, FD, IDE Controller, 2S/1P/1G, Keyboard

386SX-40MHz ISA Bus w/1MB RAM	$187
486SLC-33MHz ISA Bus w/1MB RAM	217
486SX-33MHz 64K C. w/1MB RAM	299
486DLC-40MHz w/128K C. VLB w/1MB RAM	299
486DLC-40MHz w/128K C. ISA w/1MB RAM	269
486SLC-66MHz 64K C. Ext VLB w/1MB RAM	399
486SLC-66MHz 16K C. Int w/1MB RAM	345
486SLC-50MHz 16K C. Int w/1MB RAM	317
486DX-33MHz 256K C. VLB w/1MB RAM	399
486DX2-50MHz 256K C. VLB w/1MB RAM	429
486DX2-66MHz 256K C. VLB w/1MB RAM	539

PCI/VLB

486DX2-66MHz PCI/VLB 256K C. w/420MB	$1389
486DX2-50MHz PCI/VLB 256K C. w/420MB	$1329
486DX-33MHz PCI/VLB 256K C. w/420MB	$1279

PENTIUM 60/66

INTEL Pentium 60/66MHz PCI /VLB 512K C. 16MB RAM, PCI VGA WD ACCELERATOR 1.4 MB FD, Mitsumi K/B w/540MB IDE, 15" SVGA Monitor, w/1.08GB SCSI, 17" SVGA Monitor — $2947 / $3577

DX/DX2 EISA LB

486DX 32Bit EISA LB 256K C. 4MB RAM 1MB VRAM S3 WD Accelerator 32Bit Video 245MB HD, IDE 32Bit C. Cntrl. 1.4MD FD, K/B, SVGA 14" Monitor

w/DX-33MHz CPU...	$1187
w/DX2-50MHz CPU...	$1237
w/DX2-660MHz CPU...	$1337

EISA/VLB

VEGA 486DX2-66MHz EISA VLB 256K C. w/245MB	$1257
VEGA 486DX2 50MHz EISA VLB 256KC. w/245MB	$1198
VEGA 486DX-33MHz EISA/VLB 256K C. w/245MB	$1087
Green PC 486DX2-66MHz VLB 256K C. w/245MB	$1157
Green PC 486DX-40MHz VLB 256K C. w/245MB	$1039

IBM SLC/VLB

486SLC-66MHz VLB 64KC. w/170MB	$967
486SLC-66MHz ISA 16K Int. w/170MB	$937
486SLC-50MHz ISA 16K Int. w/170MB	$899
486SLC-33MHz ISA w/170MB	$797

VESA/LB

486DX2-66MHz VESA LB 256K C. w/245MB	$1139
486DX2-50MHz VESA LB 256K C. w/245MB	$999
486DX-40MHz VESA LB 256K C. w/245MB	$1017
486DX-33MHz VESA LB 256K C. w/245MB	$977
486SX-33MHz VESA LB 256K C. w/245MB	$917

ISA/DLC

486DLC-40MHz VLB 64KC. w/245MB	$899
486DLC-40MHz 64KC. w/245MB	$869
386DX-40MHz 128KC. w/120MB	$799
386SX-40MHz w/120MB	$759

SINCE 1987, ACI has provided thousands of our customers through out the United States with superb systems built to meet their specific requirements. ACI's committment to YOU provides a full 1 YEAR WARRANTY on LABOR and PARTS, 72 HOURS BURN-IN TIME and QUICK DELIVERY with UPGRADES AVAILABLE!

•CD-ROM•

CD-ROM Single-Speed CM 205	$147
Sony CD-ROM Double Speed	189
Sony CD-ROM Double Speed w/16 bit Sound Card	277
NEC Triple Speed (OEM) CD ROM	447

•SOUND CARDS•

Sound Blaster Card	$109
Sound Blaster Pro	169
Spectrum 16 Pro Audio w/SCSI Interface	149

•MOTHERBOARDS•

Intel Pentium-60MHz PCI Bus 512K C. w/CPU	$1169
Pentium 60/66MHz PCI Bus 512K C. w/o CPU	399
Amtr ISA/VLB Green PC w/DX2-50MHz 256K C.	355
Amtr ISA/VLB Green PC w/DX2-66MHz 256K C.	459
VEGA ISA/VLB Green PC w/DX2-50MHz 256K C.	439
VEGA PCI/VLB 486DX2-66MHz 256K C.	649
VEGA PCI/VLB 486DX2-50MHz 256K C.	539
VEGA PCI/VLB 486DX-33MHz 256K C.	519
VEGA EISA/VLB 486DX2-66MHz 256K C.	659
VEGA EISA/VLB 486DX2-50MHz 256K C.	535
VEGA EISA/VLB 486DX-33MHz 256K C.	535
VESA LBus 486DX2-66MHz 256K C. w/ P5 Socket	429
VESA LBus 486DX-40MHz 256K C.	325
VESA LBus 486DX2-50MHz 256K C.	325
VESA LBus 486DX-33MHz 256K C.	295
VESA LBus 486SX-33MHz 128K C.	209
IBM 486SLC2-50MHz ISA 16K Int. w/Math Co.	215
IBM 486SLC2-66MHz ISA 16K Int. w/Math Co.	245
IBM 486SLC2-66MHz VLB 64K Ext. w/Math Co.	305
IBM 486SLC-33MHz ISA w/CPU	109
CYRIX 486DLC-40MHz VLB 128K C. w/Math Co.	209
CYRIX 486DLC-40MHz ISA 128K C. w/Math Co.	179
CYRIX 486DLC-33MHz w/Math Co. 128K C.	169
386DX-40MHz w/128K Cache	119
386SX-40MHz	79

•MODEMS•

Internal 2400BPS w/Bitcom S/W	$29
Internal 9624 Fax/Modem w/Bitcom Fax	55
Internal Voice/Fax/Modem 9600/2400	87
Internal 14.4K Fax/Modem MNP5/V.17	129
Pocket Size External 9600/2400BPS Fax/Modem	95
External 24/96/14.4K	CALL
Internal 9600BPS Modem V.42bis/MNP5	119

•KEYBOARDS•

Mitsumi 101 Enhanced Keyboard	$27
FOCUS 2001 101 Keys Click	42
FOCUS 9000 129 Keys Programmable	69
Fujitsu 4700 101 Keys	47
Fujitsu 4870 101 Keys	37
Maxi Switch Deluxe 101 Keys	37
Maxi Switch 124 Key Programmable	69

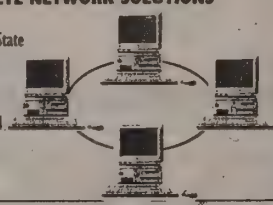
•NETWORK•

NETWORK PRODUCTS

Ethernet NE2000 Coax Card	$49
Ethernet NE2000 10 Base-T, Twisted Pair	49
Novell NE2100 Bus Master NIC (10 Base-2 (BNC)/10 Base-5 (AUI))	49
Lantastic A15.0 Single For Windows/DOS	88
Concentrator, UPS, LANSoftware	CALL

COMPLETE NETWORK SOLUTIONS

Service & Support
Installation Done by State Licensed Personnel
FREE Estimate
Novell Engineer
Reference on Demand
Demo Available



CALL FOR PRINTER & MONITOR REPAIR

ISA/VLB/CACHE •CONTROLLER•

Adaptec/Ulrastor/Promise/Tekram/DTC/Bus Logic	CALL

• VIDEO •

MGP	$15
VGA 256K 16 Bit	35
Trident SVGA 512K	45
Trident SVGA 1MB	61
Cirrus Logic VESA LB 1MB, 32 Bit Video	79
ATI Wonder XL24 1MB	117
ATI Ultra 1280x1024 1MB	279
ATI Ultra Plus 2MB DRAM	319
ATI Pro VESA LB 2MB VRAM 32-bit	415
Diamond Stealth 24 VESA LB, S3 Chip, 1MB	160
Diamond Stealth Pro VESA LB 1MB VRAM up to 2MB	249
Diamond Speedstar Pro VESA LB 1MB	125
Diamond Stealth 32 PCI VLB w/2MB DRAM	419
Orchid Fahrenheit VLB 32-bit 1MB exp. 2MB	169
Orchid VESA LB S3 Chipset w/1MB DRAM	CALL
AT I/O (2S, 1P, 1Game) Ports	15
AT IDE (Dual HD/FD Controller) w/Cable	15
AT Super IDE w/I/O (Dual HD/FD) Controllers	19

•HARD DISK/TAPE BACKUP•

Seagate, Western Digital All Models	CALL
Conner, Maxtor All Models	CALL
Fujitsu, Quantum All Models	CALL
1.2MB FDD (5.25")	48
1.4MB FDD (3.5")	45
1.2/1.4MB Dual FDD	135
2.88MB FDD (3.5")	99
120MB IDE HDD (17ms)	169
170MB IDE HDD (17ms)	185
245MB IDE HDD (15ms)	209
340MB IDE HDD (12ms)	265
420MB IDE HDD (12ms)	295
Maxtor 545MB IDE HDD (8.5ms)	397
Quantum 1080S 1.08GB(9ms)	770
Quantum 1800S 1.8GB (9ms)	1128
Seagate 12550N 2.4GB (9ms)	1649
Micropolis 1926 2.4GB (9ms)	1489
Micropolis 1936 3.6GB (9ms)	1937
120MB Tape Back-Up Int.	95
250MB Tape Back-Up Int.	148
525MB SCSI Tape Back-Up 200KB/Sec	468
2GB Data Tape Back-Up, SCSI-2 Interface (SONY)	798
8GB Tape Back-Up SCSI-2 Interface (SONY)	918

• MONITORS •

Edition 14" Amber	$89
Edition 14" White	89
14" SVGA .39dp 1024x768	207
Hi-Com 14" 1024x768 .28dp Interlaced	219
Shamrock 14" (1024x768) .28DPI N-I	239
Shamrock 15" (1280x1024) .28DPI N-I	337
Sceptre CD-615 15" Low Radiation N-I	369
Sceptre CD-615GL 15" Energy .28dp N.I.	437
Kenitec 17" 1280x1024 .28dp N.I.	649
Shamrock 20" 1280x1024 .28dp N.I.	1179
NEC, Sony, MAG All Models	CALL
Viewsonic, Mitsubishi All Models	CALL

ALL SYSTEMS ABOVE INCLUDE:

- 4MB RAM of High Speed 70ns
- 1024 x 768 SVGA card
- 1.4MB Floppy Drive
- 1 Parallel, 2 Seriel, 1 Game Port(s)
- 14" SVGA Color Monitor
- BTC 101 Key Enhanced Keyboard
- Desktop or Mini Tower Case w/Digital Display
- Serial Mouse

UPGRADES

VIDEO UPGRADE

• Diamond Viper VLB 2MB VRAM	$345
• PCI VGA Windows Accelerator	155
• Diamond SpeedStar Pro VLB 1MB	89
• Diamond Stealth 24VLB 1MB, S3 Chip	115
• 32-bit SVGA VESA LB Cntrl.	45
• 32-bit IDE VESA LB Cntrl.	19
• PCI IDE Hard Disk Cntrl.	35

HARD DISK

• 345MB IDE (15ms)	$75
• 420MB IDE (13ms)	117
• 540MB IDE (8.5ms)	229
• 1.08GB SCSI (9MS)	577

MONITOR UPGRADE

• Shamrock 14" N.I. 1024x768, .28dp	$57
• Shamrock 15" N.I. 1280x1024, .28dp	147
• Sceptre CC-615 15" Low Radiation, .28dp.	189
• Sceptre CC-615GL 15" Energy, .28dp	255
• Shamrock 17" N.I. 1280x1024, .28dp	537

ACI COMPUTERS (714) 838-4443

205 W. FIRST STREET • SUITE #106 • TUSTIN, CA 92680
HOURS: Mon.-Fri. 10-6, Sat. 10-5
Prices subject to change.FINANCING AVAILABLE

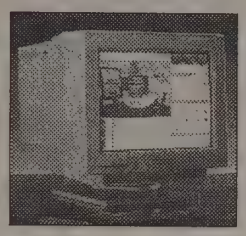
FINANCING AVAILABLE
SALES & SERVICE & NETWORKING

MasterCard VISA

QUALITY FROM THE COMPANY YOU KNOW & TRUST!

Monitors

NANAO



F340iW	15"	.28	1280 X 1024	$675
F550i	17"	.28	1280 X 1024	899
F550iW	17"	.28	1280 X 1024	1,059
F560iW	17"	.28	1280 X 1024	1,375
T560i	17"	.25	1280 X 1024	1,549
T660i	20"	.28	1280 X 1024	2,199
F760iW	21"	.31	1280 X 1024	1,949
F780iW	21"	.31	1280 X 1024	3,199

* Prices Quoted Include Manufacturer's Rebate

MAG

MX-14S	14"	.28	Trinitron Tube	$499
MX-15F	15"	.28	1280 x 1024	499
DX-15F (Green)	17"	.26	1280 x 1024	425
MX-17F	17"	.26	1280 x 1024	849
DX-17F (Green)	17"	.26	1280 x 1024	725
MX-17G	17"	.26	1280 x 1024	829

VIEW SONIC

4E	14"	Super VGA .28	1024 X 768	$269
6E	14"	Super VGA NI .28	1024 X 768	289
7E	17"	Super VGA NI .28	1024 X 768	735
14E	14"	Super VGA NI .28	1024 X 768 70Hz	320
15E	15"	Flat Screen NI .28	76Hz refresh	370
15	15"	Digital Multi-Freq. .28	1280 x 1024	445
17G	17"	Digital Multi-Freq. .28	1280 x 1024	765
17	17"	Digital Multi-Freq. .28	1600 x 1280	945
20	20"	Digital Multi-Freq. .28	1600 x 1280	1495
21	21"	Digital Multi-Freq. .28	1600 x 1280	1725

NEC

3V	15"	Multi-Freq Green EPA .28		$490
3FGe	15"	Color Monitor .28	1024 x 768	590
4FGe	15"	Multi-Freq .28	1024 x 768	650
5FG	17"	Multi-Freq .28	1024 x 768	1040
MultiSync 5FGP	17"	.28	1280 x 1024	1170
MultiSync 6FGP	21"	.28	1280 x 1024	2120

SOUND CARDS

PRO AUDIO Spec. 16	$199
MEDIA VISION 16 STUDIO	199
SOUND BLASTER 16Bit AST	249
STUDIO SOUND	249
SOFTWARE & Other Kits	CALL!!!

SYSTEM BOARDS

AMI

(Made in USA)
(w/CPU, OK Memory)

Excaliber Pentium PCI 60MHz	$1399
Excaliber Pentium VLB 60MHz	1299
Excaliber Enterprise IV 486DX2-66MHz EISA VLB	949
Excaliber Enterprise IV 486DX2-50MHz EISA VLB	925
Excaliber Enterprise IV 486DX2-33MHz EISA VLB	749
Super Voyager II 486DX2-66MHz PCI	899
Super Voyager II 486DX2-33MHz PCI	699
Super Voyager II 486DX2-66MHz VLB	849
Super Voyager II 486DX-33MHz VLB	599
Super Voyager II 486SX-33MHz VLB	339
Super Voyager II 486SX-25MHz VLB	449

MICRONICS COMPUTERS INC

M2Pi Pentium 60MHz PCI	$1655
M5Pi Pentium 60MHz PCI	1199
M5Pi Pentium 66MHz PCI	1299
M5PePentium 60MHz PCI EISA/PCI	1399
M5PePentium 66MHz PCI EISA/PCI	1499
EV 486 DX2-66MHz EISA VLB	829
EV 486 DX-33MHz EISA VLB	729
E3 486 DX2-66MHz EISA	719
E3 486 DX-50MHz EISA	719
E3 486 DX-33MHz EISA	609
MX-30 486 DX2-66MHz VLB	649
MX-30 486 DX-33MHz VLB	549
MX-30 486 SX-25MHz W/OK Cache	249
JX 30 DX2-66MHz	649
JX 30 DX2-33MHz	549

AIR

(USA) w/o CPU, OK Memory) - VESA LB

Baby 486 EISA VLB (72 pin Memory)	$379
Baby 486 EISA VLB (30 pin Memory)	389
3 VLB Slots, Bus Master Function, & ZIF Socket	
486MI VLB	219
Baby 486 VLB	179
586 Pentium VLB	499

(USA) YMS VEGA

Baby 486 EISA VLB (30 pin Memory)	$299
72 Pin SIMM Modules	
Mini 486 VLB Zif Socket	169
Mini 486 VLB 72 Pin SIMM Socket	189
ISA 486 64MB Glayers M/B	CALL!!!
Baby 486 M/B w/64K Cache	179
Baby 486 M/B w/256K Cache	199
Baby 3486 M/B w/64K Cache	149
Baby 3486 M/B w/256K Cache	169

(USA) MCCI

486DX-33	EISA/VESA	256K	$499
MINI 486DX-33	EISA/VESA	256K	549
SUPER 486DX-33	EISA/VESA	512K	779
SUPER 486DX-33	EISA/VESA	1MB	949

HARD DRIVES

MICROPOLIS

MC2205A	IDE 3.5 10ms	560MB
MC2210	IDE 3.5 10ms	1050MB
MC1924	SCSI 5.25 11ms	2100MB
MC2217	SCSI 5.25 10ms	1371MB
MC1936	SCSI 5.25 12ms	3020MB

Maxtor

724A	IDE 3.5 15ms	245MB
LXT7345A	IDE 3.5 15ms	345MB
LXT7345S	SCSI 3.5 15ms	345MB
MXT7540A	**IDE3.5 8.5ms**	**540MB**
MXT540S	IDE 3.5 8.5ms	345MB
MXT1240	IDE 3.5 8.5ms	1.2GB

Quantum™

LPS240A	IDE 3.5 16ms	240MB
LPS240S	SCSI 3.5 16ms	240MB
LPS525S	SCSI 3.5 10ms	525MB
PD425A	IDE 3.5 13ms	425MB
PD425S	SCSI 3.5 13ms	425MB
PD1050	SCSI 3.5 10ms	1GB

HEWLETT PACKARD

(5 Yr. Warranty!)
C2247 FAST SCSI II 1.2GB
10MS Bundled with AMI's
Fast SCSI II EISA or VLB

Cache Controller			$1,149
C2247	SCSI II 3.5" 9.5ms	1.2GB	$799
C2490	SCSI 5.25 11ms	2.1GB	1699

WESTERN DIGITAL

CAV 2200	IDE 3.5 12ms	210MB
CAV 2250	IDE 3.5 12ms	250MB
CAV 2340	IDE 3.5 12ms	340MB
CAV 2420	**IDE 3.5 12ms**	**420MB**

FUJITSU

M2624A	SCSI 3.5	12ms	525MB
M2624T	IDE 3.5	12ms	525MB
M2654SA	SCSI 5.25	12ms	2GB
M2694ESA	SCSI 3.5	10ms	1GB
M2266SA	SCSI 5.25	14ms	1GB
SEAGATE	fast SCSI II		
ST43400	FAST SCSI II	10ms	2.9GB
ST 12550 BARRACUDA			
ST42100	FAST SCSI II	13ms	1.9GB
ST42400	FAST SCSI II	11ms	2.1GB

PC POWER & COOLING

270W SILENCER	$169
300W TURBO-COOL	179
450W TURBO-COOLL	329

WE GUARANTEE THE BEST PRICES !!!

CONTROLLERS

AMI FASTDISK	EISA / CACHING	$399
AMI FASTDISK	EISA / NON-CACHING	219
AMI FASTDISK	VLB 32Bit CACHE	399
AMI FASTLAN	SCSI II / ETHERNET	449
AMI FASTLAN	ETHERNET	329
MYLEX DCE	EISA / SCSI II CACHING	449
MYLEX LNE	EISA / ETHERNET	299
ADAPTEC	2742 EISA / SCSI II	425
ADAPTEC	1542B ISA / SCSI II	279
34F	VLB / SCSI II	279
PROMISE	VLB IDE / CACHING	199

VIDEO DIAMOND

Speed Star Pro Graphics Accelerator w/1MB	$109
Speed Star Pro VLB Accelerator w/1MB	109
Stealth-24 ISA Windows Accelerator w/1MB	165
Stealth-24 VLB Windows Accelerator w/1MB	159
Stealth Pro Graphics Accelerator w/1MB VRAM	249
Stealth Pro VLB Graphics Accelerator w/1MB VRAM	249
VIPER VLB Graphics Accelerator w/2MB VRAM	365
BRAND NEW!! Stealth 32 PCI w/2MB RAM	249
BRAND NEW!! VIPER PCI w/2MB VRAM	439

ORCHID

Fahrenheit Windows Accelerator w/1MB	$145
Fahrenheit VLB Windows Accelerator w/1MB	$145
BRAND NEW! Orchid KELVIN 64 VLB	**185**
BRAND NEW! Orchid KELVIN 64 PCI	**199**

ATI

Graphics Ultra+ VLB mach32 w/1MB DRAM	$249
Graphics Ultra+ (1280x1024, 2MB DRAM)	$249
Graphics Ultra Pro (1280x1024 NI, 2MB VRAM)	$349
Graphics Ultra Pro EISA w/2MB VRAM	$249
VLB mach 32 Graphics Ultra Pro w/2MB VRAM	$375
Graphics Ultra PCI w/1MB	$249

MULTIMEDIA

SONY	CALL!!!
NEC 2Sp, 3Sp, & 4Sp	CALL!!!
TOSHIBA XMA3401-B	**$379**
TEXEL DM3021	CALL!!!
MITSUMI	$199

SYSTEMS / CASES

ATTENTION!!!

WE CUSTOM CONFIGURE SYSTEMS TO YOUR SPECIFICATIONS. CALL ONE OF OUR FRIENDLY & KNOWLEDGEABLE CONSULTANTS TODAY!

DIAMOND CASES

MINI TOWER 230W
MID / FULL TOWER 250W
SUPER TOWER 300W
HEAT FAN

• Open M-F 8AM-6PM

- Prices Subject to Change
- Not Responsible for Typographical Errors

serving you for 8 years

SOFT HARD SYSTEMS

(818) 999-9531
(818) 999-9683 FAX
6301 DeSoto Ave. Suite C.
Woodland Hills, CA 91367

FREE

3 YEARS ON - SITE SERVICE

486DX4/100 VL-bus System

8MB (1 pc. 36-bit) system RAM, max 128MB
256K secondary write-back cache RAM
Pentium OverDrive ready; supports 3.3V CPU's
Green function motherboard
1.2MB and 1.44MB floppy drives, Teac
540MB IDE hard drive
32-bit VL-bus IDE HDC w/FDC; 2S, 1P, 1G ports
15" Shamrock SVGA N/I monitor (1280x1024, .28)
32-bit VL-bus SVGA card w/1MB DRAM, accelerator
101-key enhanced keyboard
Medium tower case w/230W UL-appd P/S
MS-DOS 6.2 w/ disks & guide

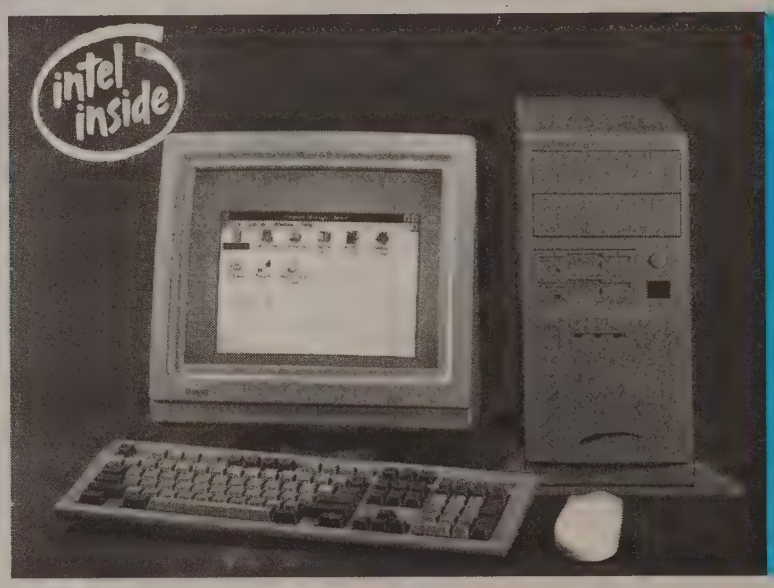
486DX4/100 VL-bus System..... $call

486DX/DX2 VL-bus System

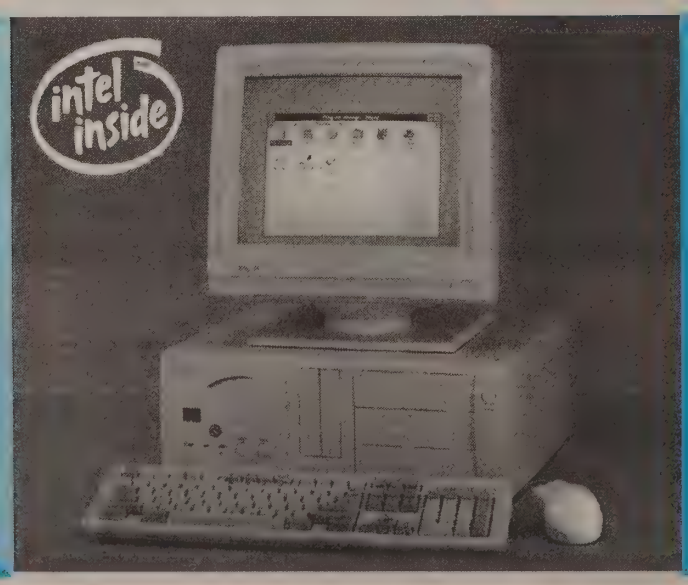
4MB (36-bit) system RAM, max 128MB
256K secondary write-back cache RAM
Pentium OverDrive ready; supports 3.3V CPU's
Green function motherboard
1.2MB and 1.44MB floppy drives, Teac
245MB IDE hard drive
32-bit VL-bus IDE HDC w/FDC; 2S, 1P, 1G ports
14" Shamrock SVGA monitor (1024x768, .28)
32-bit VL-bus SVGA card w/1MB DRAM, accelerator
101-key enhanced keyboard
Mini tower case w/230W UL-appd P/S
MS-DOS 6.2 w/ disks & guide

AMD 486DX/40 VL-bus System $1219
Intel 486DX/33 VL-bus System $1249
AMD 486DX2/66 VL-bus System $1439
Intel 486DX2/66 VL-bus System $1469

Upgrade to 345MB IDE hard drive.....$65
Upgrade to 14" Shamrock N/I monitor.....$15
Upgrade to medium tower case (230W).....$15



NOTE:
We custom configure systems to meet your needs. If you don't see it, please call for a quote.



486SX VL-bus System

4MB (36-bit) system RAM, max 128MB
256K secondary write-back cache RAM
Pentium OverDrive ready; supports 3.3V CPU's
Green function motherboard
1.44MB floppy drive, Teac
170MB IDE hard drive
32-bit VL-bus IDE HDC w/FDC; 2S, 1P, 1G ports
14" Shamrock SVGA monitor (1024x768, .39)
32-bit VL-bus SVGA card w/1MB DRAM, accelerator
101-key enhanced keyboard
Mini AT (desktop) case w/230W UL-appd P/S
MS-DOS 6.2 w/ disks & guide

Intel 486SX/25 VL-bus System..... $1059
Intel 486SX/33 VL-bus System..... $1199

Upgrade to 245MB IDE hard drive $60
Upgrade to 14" Shamrock N/I monitor $45
Add 1.2MB floppy drive $49

MARS

COMPUTERS

Los Alamitos Office:
Phone: (310) 493-0719
Fax: (310) 493-0787
10655 Humbolt Street,
Los Alamitos, CA 90720
Days/hours of operation:
M-F, 7:30-6:30

Van Nuys Office:
Phone: (818) 785-7608
Fax: (818) 785-7634
16209 Victory Boulvard,
Van Nuys, CA 91406
Days/hours of operation:
M-F, 9:00-5:30
(Or by appointment)

BETTER BUSINESS BUREAU Pledged To Advertising

Celebrating Our 6th Year in Business!

COMPONENTS:
We also have excellent prices on a full range of PC-compatible components. Please call for a quote.

SOFTWARE:
Sorry, we only carry operating systems and GUI's.

SERVICES AVAILABLE:
Component replacement upgrades, Local Area Network (LAN) installation and setup (Novell and LANtastic).

WARRANTY (ON COMPLETE SYSTEMS):
Parts one year (CPU=30 days); lifetime labor for repair or replacement of defective hardware/software); and three (3) years of on site service within most of LA and Orange counties (outlying areas may be covered with a surcharge). Please ask your sales person for details and specific service area coverage.

NO SURCHARGE FOR CREDIT CARDS:
We Accept

VISA MasterCard DISCOVER

DISCLAIMER
Prices, configurations, availability and terms and conditions are subject to change without notice.

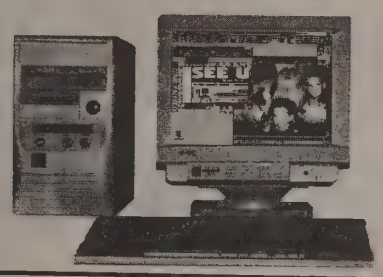
Ad code: MT041894

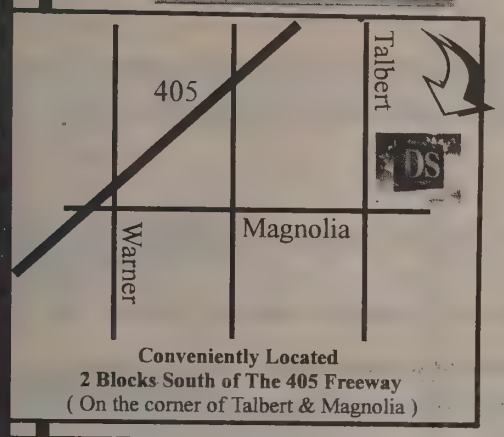
If You Don't

SEE US

You're Buying Blind!

We Offer QUALITY, SERVICE, & COMPETITIVE PRICES





Conveniently Located
2 Blocks South of The 405 Freeway
(On the corner of Talbert & Magnolia)

We Encourge Comparison Shopping!
✓**Compare Our Prices!**
✓**Compare Our Quality!**
WE HAVE NO COMPETITION!

NEW

486SLC3 75MHz $1499 $1545*

3 Slot VLB MotherBoard, 256K Cache, P24 Ready ZIF, 4MB 72 pin 70ns RAM
210MB 12ms IDE HDD, 1.2MB or 1.44MB FDD, 14" SVGA Monitor .28dp
1MB SVGA Video Card, IDE IO Controller 2S/1P/1G, 101 Enhanced Keyboard
3 Button MS Mouse, Mini Tower or Desktop, 1 Year Parts & 2 Years Labor

486SLC2 66MHz $1260 $1299*

3 Slot VLB MotherBoard, 256K Cache, 4MB 70ns RAM, 210MB 12ms IDE HDD
1.2MB or 1.44MB FDD, 14" SVGA Monitor .28dp, 1MB SVGA Video Card
IDE IO Controller 2S/1P/1G, 101 Enhanced Keyboard, 3 Button MS Mouse
Mini Tower or Desktop, 1 Year Parts & 2 Years Labor

486DLC 40MHz $1066 $1099*

2 Slot VLB MotherBoard, 128K Cache, 4MB 70ns RAM, 210MB 12ms IDE HDD
1.2MB or 1.44MB FDD, 14" SVGA Monitor .28dp, 1MB SVGA Video Card
IDE IO Controller 2S/1P/1G, 101 Enhanced Keyboard, 3 Button MS Mouse
Mini Tower or Desktop, 1 Year Parts & 2 Years Labor

486DLC 40MHz $969 $999*

ISA Bus MotherBoard, 128K Cache, 4MB 70ns RAM, 210MB 12ms IDE HDD
1.2MB or 1.44MB FDD, 14" SVGA Monitor .28dp, 1MB SVGA Video Card
IDE IO Controller 2S/1P/1G, 101 Enhanced Keyboard, 3 Button MS Mouse
Mini Tower or Desktop, 1 Year Parts & 2 Years Labor

★ 3% Check Guaranteed Charge All Specials Include Math-Coprocessors

UPGRADES UPGRADES UPGRADES UPGRADES UPGRADES UPGRADES

386 to 486

CPU & Math-Co
386 to 486DLC 40MHz.....$165
386 to 486DLC 33MHz.....$135
CPU & Math-Co on VLB MotherBoard
386 to 486DLC 40MHz.....$245
386 to 486DLC 33MHz.....$225

486 to PENTIUM

Pentium 60MHz MB PCI.....$1195
Pentium 60MHz MB SCSI....$1295
Pentium 66MHz MB PCI.....$1395
Pentium 66MHz MB SCSI....$1495

Any Custom Configuration Available!
Call Us For Your Personal Quote!

Multimedia

SONY 2X Pro Audio 16.....$399
Phillips 2X Pro Audio 16.....$399
Toshiba 2X Pro Audio 16.....$589
Plextor 2X Pro Audio 16.....$525

Monitors

14" SVGA .28dp INT ARCUS.....$245
14" SVGA .28dp NI ARCUS.....$265
15" SVGA .28dp NI ARCUS.....$395
15" PROTON .28dp NI.....$475
17" EVERVIEW .26dp.....$750

Hard Drives

210MB Western Digital.....$210
250MB Western Digital.....$245
340MB Western Digital.....$315
420MB Western Digital.....$325
540MB Western Digital.....$445

*** Labor Not Included In Upgrade Prices**

18052 Magnolia St., Fountain Valley, CA 92708

DS DEVELOPMENT SYSTEMS

Phone (714) 965-5383 Fax (714) 965-5385

SALE • UPGRADE • REPAIR • DATA RECOVERY • INSTALLATION

WE HAVE WHAT YOU NEED!

MONTHLY SPECIAL
PENTIUM ZIFF SOCKET READY

486DX-33/66MHz 256K CACHE
- 4MB Memory, 70ns
- 1.2 & 1.44FDD
- 3 Button Mouse
- IDE I/O 2 Serial/1 Parallel/1 Game Port
- SVGA w/1MB RAM
- SVGA .28dpi, Non-Interlaced
- 101 Enhanced Keyboard
- Minitower w/Digital
- 260MB HDD

$1139/$1269

intel inside

VESA LOCAL BUS ADD $49

MONTHLY SPECIAL

IBM 486SLC2/66MHz
- IBM Manufactured Motherboards
- 4MB Memory, 70ns
- 1.2 & 1.44FDD
- 3 Button Mouse
- IDE I/O 2 Serial/1 Parallel/1 Game Port
- SVGA w/1MB RAM
- SVGA .28dpi, Non-Interlaced
- 101 Enhanced Keyboard
- Minitower w/Digital
- 260MB HDD

$1019

MONTHLY SPECIAL

486SLC/33MHz $859
- 2MB Memory, 70ns
- 1.2 & 1.44FDD
- 3 Button Mouse
- IDE I/O 2 Serial/1 Parallel/1 Game Port
- SVGA w/1MB RAM
- SVGA .28dpi, Non-Interlaced
- 101 Enhanced Keyboard
- Minitower w/Digital
- 260MB HDD

MONITOR

SHAMROCK FULL SCREEN
1024x768
14" SVGA N/I
- .28 Dot Pitch

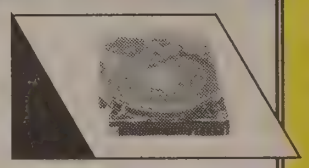
$229

HARD DRIVE SPECIAL

SEAGATE 260MB
3.5" IDE

$215

OTHER DRIVES CALL!



CD ROM UPGRADE SPECIAL

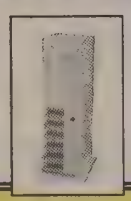
PANASONIC DOUBLE SPEED
CREATIVE LAB SOUND BLASTER 16
$299

INTEL CPU SPECIAL

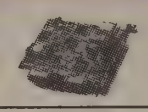
66MHz $399

CASES + POWER SUPPLY

Minitower w/Digital	$42
Midtower w/Digital	$65
Fulltower w/Digital	$89



INTERNAL FAX/MODEM

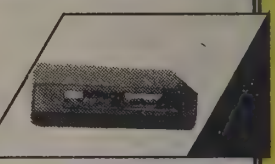


V32, V32bis, V42, V42bis w/MNP5	$119
FMDM-1964824G	$49

COLORADO TAPE DRIVE

250MB $169

Software Included



HARD DRIVE REPAIR

CAPACITY	REPAIR PRICE MFM/IDE/RLL	REPAIR PRICE ESDI/SCSI	CAPACITY	REPAIR PRICE MFM/IDE/RLL	REPAIR PRICE ESDI/SCSI
10-19MB	$40	$45	120-160MB	$110	$115
20-29MB	$45	$50	161-230MB	$130	$135
30-39MB	$55	$60	231-330MB	$160	$160
40-49MB	$65	$70	331-430MB	$200	$205
50-85MB	$90	$95	431-700MB	$230	$235
86-119MB	$100	$105			

MONITOR REPAIR

MONITOR	QUANTITY: 1	2-5	6-10	11+
Any Mono	$39	$37	$35	$33
Any CGA	$55	$53	$51	$49
Any EGA	$59	$57	$55	$53
Any VGA	$69	$67	$65	$63
Any Super VGA	$75	$73	$71	$69
Any Multisync	$89	$87	$85	$83
Any Mono Terminal	$65	$63	$61	$59
Any Color Terminal	$89	$87	$85	$83

12" & 14"

CRT AND FLYBACKS EXCLUDED

FREE Pick-up & Delivery in O.C. if more than Five Monitors

DATA RECOVERY

CAPACITY	MFM/RLL/IDE ESDI/SCSI	CAPACITY	MFM/RLL/IDE ESDI/SCSI
10-19MB	$180	120-160MB	$480
20-29MB	$230	161-230MB	$530
30-39MB	$280	231-330MB	$580
40-49MB	$330	331-430MB	$630
50-85MB	$380	431-700MB	$680
86-119MB	$430		

Specialize in Mac, DOS, Novell
Data Recovery Includes
Repair Of The Drive
No Charge If We Are Unable To Recover Data

SYSTEM UPGRADE

XT to 386SX/33MHz w/1MB $129
XT to 486SLC/33MHz w/1MB $149
XT or 286 to 386DX/40MHz w/1MB $159
286 or 386 to 486DX-33/66MHz w/1MB
$409/$539

UPGRADE SPECIAL
XT to 486SLC/66MHz w/1MB + Math Coprocessor ONLY $289

FREE LABOR

SYSTEM REPAIR

We Will Solve Any Problem On Your System!

$30 + Parts

FLOPPY DRIVE REPAIR

5.25" (360K & 1.2MB)	$20
3.5" (720K & 1.4MB)	$25
3.5" PS/2 (720K & 1.4MB)	$35

PRO COMPUTER COMPANY

12761 Western Ave., Suite B, Garden Grove, CA 92641
TEL: 714/891-8293 • FAX: 714/891-3269

ONE YEAR WARRANTY
PARTS & TWO YEARS
WARRANTY LABOR

Business Hours:
Mon.-Fri. 9:00-6:00
Sat. 10:00-4:00

Prices and specifications are subject to change w/out notice. 15% Restocking fee on return items.

Check & Compare

#1 IN PRICE, QUALITY, RELIABILITY & SERVICE

MACK COMPUTER

2 Yr Warranty

Lease/Rental for Business Available
We do Networks, too!

HOURS:
Mon-Fri 10AM-7PM
Sat 10AM-6PM
Sun by appointment

8977 Foothill Blvd., #G
Rancho Cucamonga, CA
(909) 483-5351 • Fax (909) 989-1488

486SX-33

- 486SX-33 CPU w/256K Cache
- AMI BIOS
- **4MB RAM**
- 8 Expansion Slots
- TEAC/NEC 1.2MB Floppy Drive
- TEAC/NEC 1.44MB Floppy Drive
- **212**MB Hard Disk Drive
- Hard/Floppy Disk Controller
- 2 Serial/1 Parallel/1 Game Port
- Mini-Tower Case
- 230Watt Power Supply
- SuperVGA Graphics Controller w/1MB
- 14" SuperVGA Color Monitor w/Tilt & Swivel Base (1024 x 768 .28mm dp)
- Enhanced 101 Key Keyboard
- Mouse & Mouse Pad

Reg. 1111 — **CASH 1029**

486SLC2-66

- IBM 486SLC2-66MHZ CPU w/16K int. Cache (+64K Ext)
- Math Co-Processor
- **4MB RAM**
- Award BIOS
- 8 Expansion Slots
- TEAC/NEC 1.2MB Floppy Drive
- TEAC/NEC 1.44MB Floppy Drive
- **255**MB Hard Disk Drive
- Hard/Floppy Disk Controller
- 2 Serial/1 Parallel/1 Game Port
- Mini-Tower Case
- 230Watt Power Supply
- 16bit Hi-Color SuperVGA Graphics Controller w/1MB
- 14" SuperVGA Color Monitor w/Tilt & Swivel Base (1024 x 768 .28mm dp)
- Enhanced 101 Key Keyboard
- Mouse & Mouse Pad

VESA BUS

Reg. 1295 — **CASH 1199**

486DX-33/40

- 80486DX-33/40 CPU; 256K Cache
- **4MB RAM**; Math Co-Procesor, AMI BIOS
- 8 Expansion Slots; 2/3 **VESA** slots
- TEAC/NEC 1.2MBFloppy Drive
- TEAC/NEC 1.44MB Floppy Drive
- **255**MB IDE Hard Disk Drive
- Local Bus Hard/Floppy Disk Controller
- 2 Serial/1 Parallel/1 Game Port
- Mini-Tower Case w/230W P.S.
- 32bit Local Bus 16.7M Color SuperVGA Graphics Accelerator w/1MB
- 14" NI SuperVGA Color Monitor w/Tilt & Swivel Base (1024 x 768 .28mm dp)
- Keytronic 101 Key Keyboard
- Mouse & Mouse Pad

VESA Local Bus

Reg. 1392 — **CASH 1289**

486DX2-66

- 80486DX2-66 CPU; 256K Cache
- **4MB RAM**; Math Co-Procesor, AMI BIOS
- 8 Expansion Slots; 2/3 **VESA** slots
- TEAC/NEC 1.2MBFloppy Drive
- TEAC/NEC 1.44MB Floppy Drive
- **340**MB IDE Hard Disk Drive
- Local Bus Hard/Floppy Disk Controller
- 2 Serial/1 Parallel/1 Game Port
- Mini-Tower Case w/230W P.S.
- 32bit Local Bus 16.7M Color SuperVGA Graphics Accelerator w/1MB
- 14" NI SuperVGA Color Monitor w/Tilt & Swivel Base (1024 x 768 .28mm dp)
- Keytronic 101 Key Keyboard
- Mouse & Mouse Pad

VESA Local Bus

Reg. 1587 — **CASH 1489**

486DX2-66

- 80486DX2-66 CPU w/256K Cache;
- **8MB** RAM (exp-125MB); AMI BIOS
- 8 Expansion Slots (3 **VESA**)
- TEAC/NEC 1.2MB & 1.44MB Floppys
- **425**MB Hard Disk Drive
- **CD-ROM** Drive (2X speed)
- 16bit **Sound** Card w/CDTitle S'ware
- **Local Bus** Hard/Floppy Disk Controller
- 2 Serial/1 Parallel/1 Game Port
- Mid-Tower Case; 250W Power Supply
- 32bit Local Bus 16.7M Color SuperVGA Graphics Accelerator w/1MB
- **15"** NI SuperVGA Color Monitor w/Tilt & Swivel Base (1024 x 768 .28mm dp)
- Keytronic 101 Key Keyboard
- Mouse & Mouse Pad

Loadod VESA

Reg. 2201 — **CASH 2055**

Toshiba 2X-210ms CD ROM Drive +170
NEC 3X CD ROM Drive +200

486DX2-66

- 486DX2-66MHZ CPU; 256K Cache; AMI BIOS; **PCI Local Bus** Motherboard
- **8MB RAM** on **PCI** Local Bus
- 3 PCI Local Bus; 5 16bit ISA Slots
- TEAC/NEC 1.2MB & 1.44MB Floppys
- **425MB**IDE Hard Disk Drive
- **PCI Bus Fast IDE** Disk Controller
- 2 Serial/1 Parallel/1 Game Port
- **Tower** Case w/250W Power Supply
- **PCI, S3, Local Bus** Hi-Color SuperVGA Graphics Accelerator w/1MB
- **15"** SuperVGA Color Monitor w/Tilt & Swivel Base (1024 x 768 .28mm dp)
- Keytronic 101 Key Keyboard
- Mouse & Mouse Pad

HOT PCI Bus!

Reg. 2148 — **CASH 1989**

PENTIUM-60

- Intel *Pentium* 60MHZ CPU; 256K Cache; AMI BIOS; Math Co-Processor
- **8MB RAM** on **PCI Local Bus**
- 3 PCI Local Bus; 5 ISA Bus Slots
- TEAC/NEC 1.2MB & 1.44MB Floppys
- **425MB IDE** Hard Disk Drive
- **Fast IDE PCI** Local Bus Hard/Floppy Disk Controller
- 2 Serial/1 Parallel/1 Game Port
- **Tower** Case w/250W Power Supply
- **PCI, S3, Local Bus,** Hi-Color SuperVGA Graphics Accelerator w/1MB
- **15"** SuperVGA Color Monitor w/Tilt & Swivel Base (1280 x 1024 .28mm dp)
- Keytronic 101 Key Keyboard
- Mouse & Mouse Pad

VERY HOT Pentium PCI Bus!

Reg. 2753 — **CASH 2549**

PENTIUM-66

- Intel *Pentium 66* MHZ CPU; 256K Cache; AMI BIOS; Math Co-Processor
- **8MB RAM** on **PCI Local Bus**
- **3 PCI** Local Bus; 5 ISA Bus Slots
- TEAC/NEC 1.2MB & 1.44MB Floppys
- **540MB, 8.5ms, Maxtor SCSI-2** Hard Disk Drive
- **PCI Bus Fast SCSI-2** (NCR-53C810 chip) Hard Disk Controller
- 2 Serial/1 Parallel/1 Game Port
- **Tower** Case w/250W Power Supply
- **PCI, S3, Local Bus** Hi-Color SuperVGA Graphics Accelerator w/1MB
- **15"** SuperVGA Color Monitor w/Tilt & Swivel Base (1280 x 1024 .28mm dp)
- Keytronic 101 Key Keyboard
- Mouse & Mouse Pad

HOTTEST Pentium PCI Bus!

Reg. 3300 — **CASH 3139**

+ 200 PCI Bus Viper w/2MB .
+ 320 Upgrade to 17" monitor

brother HL-10h Laser Printer

IntelliPrint NO-HASSLE PRINTING

Features

- 10 pages per minute
- PCL® 5e emulation/PostScript® language interpreter standard
- 83 resident fonts, 10 bar codes, plus additional TrueType™ compatible fonts and High Resolution Control (HRC)
- Advanced Photoscale Technology (APT) - 256 gray scales
- High speed, bi-directional parallel/serial/PCMCIA slot
- Optimized driver to print Windows™ applications
- Auto interface and emulation switching
- Power Save mode

ONLY 1295

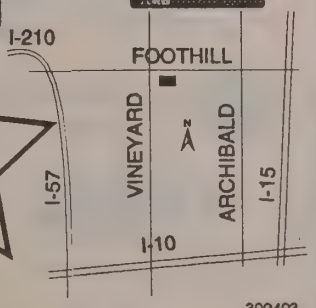
- Smartlink 19.2KBPS Fax/Modem/Int 185
- Smartlink 14.4KBPS Fax/Modem/Int 125
- Smartlink 96/24KBPS Fax/Mod.-w/voice 89
- Smartlink 96/24KBPS Fax/Modem/Int. 45
- Conner 250MB Tape/Int. 165
- Brand Name Laser Printer Memory Upgrades Available... Call
- Brand Name Hard Drives, Monitors & Cards Available... Call

Warranty: Two years on parts; two years on labor. We honor the credit cards below... Ask about our financing plans.

Three year lease prices for businesses available. Three year lease also includes on-site service and three year warranty. Short term rentals to businesses also available.

AMERICAN EXPRESS Card · MasterCard · VISA

Training Classes Available

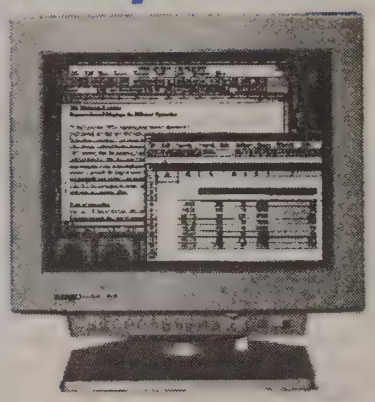


309403

Your Complete Corporate

NOW CARRYING A FULL LINE OF NANAO MONITORS

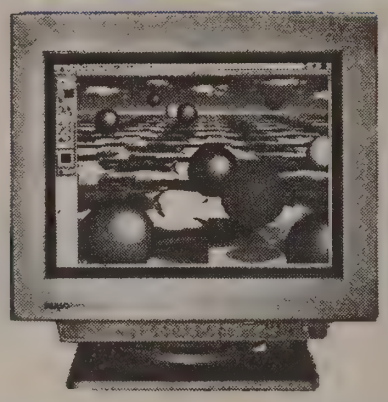
NANAO FlexScan F340i•W



- 15", .28mm dpi
- Dark Face, Non-Glare, Anti-Static Electricity
- Picture & Color Control, PowerManager
- 1024 x 768
- 75MHz
- UL, CSA, FCC (B), DHHS, Swedish MPR-II

$645

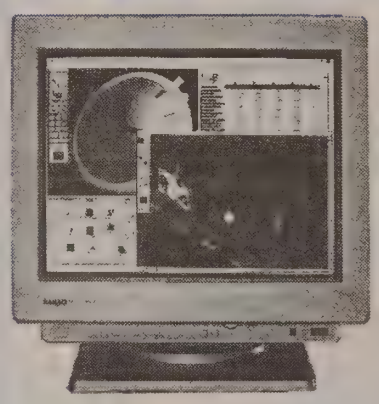
NANAO FlexScan 550i•W



- 17", .28mm dpi
- Dark Face, Anti-Static Electricity, Anti-Reflective ErgoCoat™
- Picture & Color Control, PowerManager
- 1024 x 768
- 80MHz
- UL, CSA, FCC (B), DHHS, Swedish MPR-II

$1059

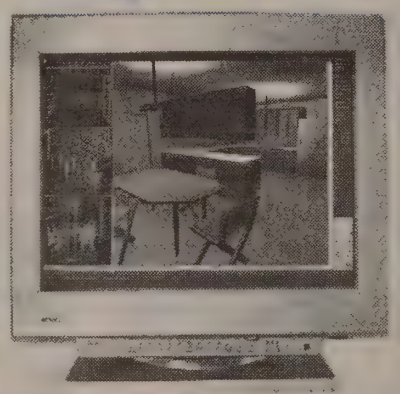
NANAO FlexScan T560i



- 17", .25mm dpi
- High Contrast, Anti-Static Electricity, Anti-Reflective ErgoPanel™
- Picture & Color Control, PowerManager
- 1280 x 1024
- 130MHz
- UL, CSA, FCC (B), DHHS, Swedish MPR-II, Requirement from TCO 1992

$1550

NANAO FlexScan F780i•W



- 21", .26mm dpi, Flat Face
- Dark Face, Anti-Static Electricity, Anti-Reflective ErgoPanel™
- Picture & Color Control, PowerManager
- 1600 x 1200
- 200MHz
- UL, CSA, FCC (A), DHHS, Swedish MPR-II, Requirement from TCO 1992

$3750

Lexmark 4037 5E Laser Printer with Toner 5 PPM

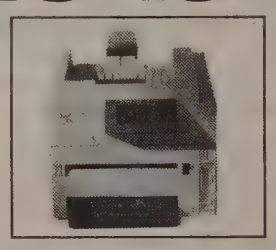
- 1500 x 300 dpi
- Energy Star Compliant
- 512K Expanded to 4.5MB
- LED Imaging
- 150 Pages Input, 75 Pages Output

$685

Lexmark 4039 10R Laser Printer with Toner 10 PPM

- 600 x 600 dpi
- 2MB RAM Exp. to 16MB RAM
- Postscript Level 1, PCL 5
- 200 Sheet Input, 250 Sheet Output
- Energy Star Compliant

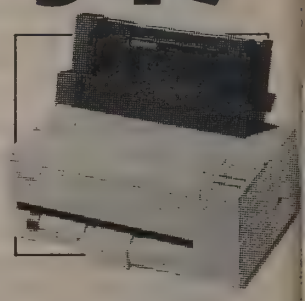
$1345



Lexmark 4076-001 ExecJet II Inkjet

- 300 CPS Draft
- 600 x 300 dpi
- 150 Paper Tray, Auto Cut Sheet

$349



CCS is an Authorized Dealer for:

COMPAQ AUTHORIZED RESELLER

COMPULINK AUTHORIZED RESELLER

NANAO

DigiBoard

Computer Technology CCS 1987-1994

IBM Personal Printers by LEXMARK™ AUTHORIZED RESELLER

MDPT

9698 Telstar Ave., #303, El Monte, CA 91731

Tel: (818) 582-8013 Fax: (818) 582-8921

Trademarks or registered trademarks are property of their respective holders.

Computer Solution

486SX-33

486SX-33
4MB RAM
1.44MB FD
IDE I/O
210MB HD
Mini Tower Case
14" SVGA Monitor
SVGA Card
101 Keyboard
Mouse

$895

386-40 MHz w/128K Cache

4 MB RAM
128 KB Cache
1.2 & 1.44 MB Floppy Drive
2S / 1P / 1G
170 MB IDE Hard Drive
Enhanced 101 Keyboard
Mini Tower Case or Desktop
SVGA Card
VGA Monitor
Serial Mouse

$785

MultiMedia System 486-33/66 VESA Local Bus w/Pentium Overdrive Ready

4MB RAM
256K Cache
1.2 & 1.44 FD (TEAC)
32 Bit Controller
420 MB Hard Drive
Enhanced 101 Keyboard
Full Size Vertical Case
Cirrus Logic (1MB) SVGA Local Bus Card
14" SVGA Monitor (1024 x 768, NI, .28)
Serial Mouse
MultiMedia Package w/Speakers
Pro Audio Spectrum 16
Sony Double Speed CD
Two Speakers

CD Titles
Compton Encyclopedia
Dune CD
Curse of Enchantia
Photo CD

$1650/1750

Pentium Overdrive Ready 486-33/66 MHz Vesa Local Bus

4 MB RAM
256 KB Cache
1.2 & 1.44 MB Floppy Drive
32 Bit IDE Controller
420 MB Hard Drive
Enhanced 101 Keyboard
Mid-Tower Case/230W P/S
Cirrus Logic Local Bus VGA Card
14" SVGA Monitor (1024 x 768, N-I)
Serial Mouse

$1300 / 1400

486DX2-33/66 EISA VESA Local Bus

4 MB RAM
256 KB Cache
1.2 & 1.44 MB Floppy Drive
2S / 1P / 1G
540MB IDE
Full Tower Case
Orchid Fahrenheit VLB
Arcus 15" Non-Interlaced Monitor
(1280 x 1024, 0.28 DPI)
Focus 2001 Key Keyboard

$1650/1750

486DX2- 33/66 VLB VESA Fast SCSI

8 MB RAM
256 KB Cache
1.2 & 1.44 MB Floppy Drive
32 Bit Bus Logic Fast SCSI-II
540 MB HD SCSI-II
Vertical Case (230 W. P/S)
2 Cooling Fans
Orchid Fahrenheit VLB 1MB
Focus 2001 Keyboard
Serial Mouse
Arcus 15" Non-Interlaced Monitor (1280 x1024)

$1999/2089

HARD DRIVES

1.2 MB FD (Teac)	$49
1.44MB FD (Teac)	40
120 MB IDE (Quantum, 15 ms)	178
210 MB IDE (WD, 15 ms)	205
245 MB IDE (Maxtor, 15 ms)	230
345 MB IDE (Maxtor, 15 ms)	285
255 MB IDE (WD, 13 ms)	225
340 MB IDE (WD, 13 ms)	235
420 MB IDE (WD, 12 ms)	295
545 MB IDE (Conner, 10 ms)	395
1.05 GB IDE (Micropolis, 10ms)	950

VIDEO CARDS

Mono Graphics Card	$13
SVGA Card (Trident, 1 MB, 1024 x 768)	58
Diamond Viper VLB (2 MB)	395
Orchid Fahrenheit VLB SVGA Card (1 MB)	140
ATI Graphic Ultra Pro (2 MB)	350
ATI Graphic Ultra Pro EISA (2 MB)	420
ATI Graphic Ultra Pro VLB (2 MB)	395
Hercules Dynamite VI SVGA (1MB)	175

MONITORS

Tatung Monitor (14", 0.39 DPI, 1024 x 768)	$215
Arcus Monitor (14", 0.28 DPI, 1024 x 768)	235
Arcus Monitor (14", 1024 x 768, N-I)	270
Arcus Monitor (15", 1280 x 1024, N-I)	415
Shamrock (14", 1024 x 768, N-I)	260
Mag Monitor (15", 0.28 DPI, 1280 x 1024)	475
Mag Monitor (17", 0.26 DPI, 1280 x 1024)	875

MODEMS

Accex Fax/Modem (9600/2400 B)	$55
INTEL 14.4K Fax/Modem (400A)	185
14.4/14.4 Fax Modem	135

LOCAL BUS MOTHERBOARD (A.I.R)

486-33 MHz w/256K Cache w/CPU	$509
486-66 MHz w/256K Cache w/CPU	739

MOTHERBOARDS

386-40 MHz w/128K Cache w/CPU	$120
486-33 MHz w/256K Cache w/ CPU	395
486-66 MHz w/256K Cache w/CPU	595
486-50 MHz w/256K Cache w/CPU	525
486DLC-40 w/128K Cache w/CPU	185

LOCAL BUS MOTHERBOARD (AMPTRON) PENTIUM OVERDRIVE READY

486-33 MHz w/256K Cache w/Cpu $425
486-66 MHz w/256K Cache w/CPU 625

MULTIMEDIA PACKAGE

CD Titles - Compton Encyclopedia, Guided Tour of Multimedia, Where in the World is Carmen San Diego? Mayo Clinic Family Health Book, Power Tools for Windows, Sound Stations for Windows

$760

CD ROM - NEC 3X1, Triple Spin, 195ms
Sound Card - Pro Audio Spectrum 16
Two Speakers
Sony CD ROM - Double Spin, 350ms

$470

MISCELLANEOUS

CD ROM Mitsumi, Double Speed, 250ms	$195
Ethernet Card, Combo 3-in-1	50

Computer Technology CCS 1987-1994

9698 Telstar Ave., #303, El Monte, CA 91731
Tel: (818) 582-8013 Fax: (818) 582-8921

Trademarks or registered trademarks are property of their respective holders.

MAGICTEK COMPUTERS

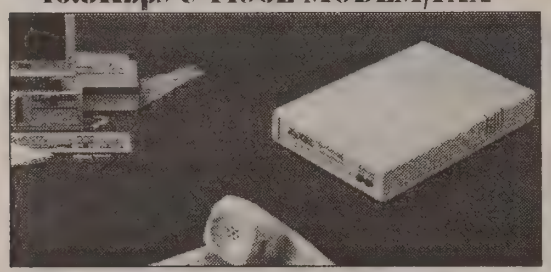
Highest Quality Systems & Service, At The Lowest Prices!

♦ FINANCING AVAILABLE ♦ FREE MOUSE PAD W/SYSTEM PURCHASE!
♦ DEALERS/ CONSULTANTS ARE WELCOME! CALL FOR PRICING!!!

BBS: (714)939-9219 ♦ TEL: (714)939-9220 ♦ FAX: (714)939-9221

PENTIUM PCI SYSTEM NOW AVAILABLE!

ZyXEL V.32 bis 16.8Kbps U-1496E MODEM/FAX



ONLY $275 (w/Purchase of Any System)

PENTIUM PCI 60MHz

- PCI Pentium 60MHz 256K Cache
- 3 PCI, 5 ISA Slots
- 8 Meg Installed Expandable to 128MB
- 540 Meg Hard Drive
- IDE Controller Built-In
- 1.2 & 1.44 Floppy Drive
- AT I/O (2S, 1P, 1G) (16550 Chip)
- PCI S3 Graphic Card 2 Meg
- ViewSonic 15 15" Monitor (1280x1024, N-I)
- Midtower Case w/230W Power Supply
- DOS 6.2 w/Manuals
- 101 Enhanced Keyboard

$2779

486-33MHz VLB / 256K CACHE

- 486-33MHz CPU (Intel)
- 256K External Cache
- Built-In Math Co-Processor & 8K RAM Cache
- 4 Meg Installed Expandable to 32 Meg On Board
- 345MB IDE Hard Drive
- IDE Controller 32 Bit VLB
- 1.2 & 1.44 Floppy Drive
- AT I/O, 2 Serial, 1 Parallel, 1 Game Ports
- Super VGA Card w/1024K 32 Bit VLB
- Super VGA Monitor Non-Interlace (.28dpi) (Viewsonic 14E 1024x768, 70Hz)
- 101 Enhanced Keyboard
- Mid Tower Case & 230W Power Supply
- DOS 6.2 w/Manuals

$145

DX2-66MHz Available .....CALL
VESA Local Bus Available.....CALL
PCI Local Bus Available.....CALL

CYRIX 486DX-40MHz 128K CACHE

- Cyrix 486DX-40MHz CPU
- 128K External Cache
- 4 Meg Installed Expandable to 32MB
- 80387 Math Co-Processor
- 245MB Hard Drive
- IDE Controller
- 1.2 & 1.44 Floppy Drive
- AT I/O, 2 Serial, 1 Parallel, 1 Game Ports
- Super VGA Card w/1024K
- Super VGA Monitor (1024x768, .28mm)
- 101 Enhanced Keyboard
- AT Digital Tower Case & 230W Power Supply
- DOS 6.2 w/Manuals

$1095

386-40MHz / 128K CACHE

- 386-40MHz CPU
- 128K External Cache
- 4 Meg Installed Expandable to 32MB
- 80387 Math Co-Processor Socket
- 200MB Hard Drive
- IDE Controller
- 1.2 & 1.44 Floppy Drive
- AT I/O, 2 Serial, 1 Parallel, 1 Game Ports
- Super VGA Card w/1024K
- Super VGA Monitor (1024x768, .28mm)
- 101 Enhanced Keyboard
- AT Digital Tower Case & 230W Power Supply
- DOS 6.2 w/Manuals

$1035

CD-ROM

Panasonic (Mitsushita) CD ROM (562)	$165
CD Software	65
Toshiba 3401 (SCSI) 200ms	345
Sony SCSI 561 CD ROM	325
NEC 3XI (560)	535

SOUND CARDS

Sound Blaster Pro Deluxe	$95
Sound Blaster 16 MCD	155
Sound Blaster Pro 16 Basic	125
Sound Blaster 16 SCSI-2	195
Sound Blaster 16 ASP SCSI 2	235
Pro Audio Studio 16	210
Pro Audio 16	120

VIDEO CARDS

VGA 256K, 16 Bits	$29
Cirrus Logic 1 MG VGA	65
VESA Local Bus Orchid Fahrenheit	145
VLB Diamond Stealth 24	150
VLB Cirrus Logic VGA	95
Video Blaster	325
All VESA Local Bus Video Cards Available	CALL
All PCI Local Bus Video Cards Available	CALL
Diamond Viper VGA w/2 Meg VRAM	360
VLB ATi Ultra Pro w/2 Meg	350

MONITORS NEW!

CALL FOR BEST PRICE!

ViewSonic 15	
ViewSonic 17	
ViewSonic 20	
ViewSonic 21"	
ViewSonic 4E 14", .28dp, 1024x768	265
ViewSonic 15E 15", .28dp, 1024x768, 72Hz Refresh	365
ViewSonic 6E 14", .28dp, 1024x768, 72Hz Refresh	295
ViewSonic 7 17", .28dp, 1280x1024, 72Hz Refresh, N/I	785
MAG 15"	469
MAG 17"	875
Optiquest	CALL
Arcus 1488 SVGA	245
VGA Mono 14"	99
Mono Amber 14"	82
Acurs 1458 Non-Interlaced	265

SLC NOTEBOOK:

- 486-33MHz
- 4MB RAM
- 1.44MB Drive
- 120MB Hard Disk
- VGA Screen
- 2 Serial, 1 Parallel
- Trackball
- Carrying Bag

$1250

486DX-33MHz	CALL
486DX-66MHz	CALL
386SX-25MHz	CALL

COLOR NOTEBOOKS NOW AVAILABLE!

PRINTERS:

Panasonic 1150	$159
Panasonic 4410	575
Epson All Models	CALL
HP Laser Printer All Models	CALL

KEYBOARDS:

Maxi-Switch	$32
Fujitsu 4700-601KB	38
Focus 2001	34
BTC 53309SX	19
Keytronic BE (Big enter)	29
Focus 9000	59
Focus 7000+ w/Trackball	49
Focus 6000	25

CASES:

Mini Tower w/Digital	$49
Mid Tower w/Digital	69
Big Tower w/Digital 230W	105
Big Tower w/Digital (10 Spaces) 250UL	135

COLORADO TAPE DRIVES:

120MB	$110
250MB	155
DC 2120 Tape XIMAT	18
Trakker 250MB	340
MicroSolutions Backup	340

MOUSE:

Logitech	$49
Microsoft	49
Portable Trackball	59
Serial Mouse	12
DEXXA Mouse	22

MEMORY CHIPS/MATH COPROCESSORS CALL!

HARD DISK:

Quantum	CALL
Maxtor	CALL
Conner	CALL
Western Digital	CALL
Micropolis 1.0GB SCSI	785

MISCELLANEOUS:

AT I/O w/16550 chip	$32
Adaptec SCSI 1542C	179
V-L IDE w/Cache (512K Upgrade to 16.5MB)	125
TEAC Floppy Drive (1.2M)	48
TEAC Floppy Drive (1.44M)	39
V-L IDE I/O Controller	29
TEAC 2-in-1	110
V-L SCSI Controller	125
SmartLink 9624 Fax/Modem	45
SmartLink14.14 Fax/Modem	120

1 Year Parts & Labor Warranty For Systems

MasterCard VISA

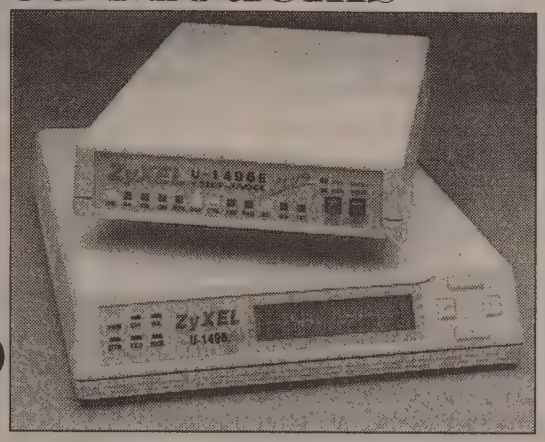
BUSINESS HOURS:

Monday-Friday: 9:30 A.M. - 7:00 P.M.
Saturday: 10:00 A.M. - 3:30 P.M.

Everyone's Talking About ZyXEL

Data Comm Top Performer JULY 1993	COMPUTER SHOPPER	BOARDWATCH MAGAZINE		MACWORLD 200 TOP RATED	JULY 1993 BYTE BEST VALUE HIGH-SPEED MODEM	JULY 1993 BYTE BEST TWO-WAY ALL-AROUND MODEM	PC MAGAZINE EDITORS' CHOICE	PC PROFESSIONELL
ZyXEL U-1496 Plus	July 1993 ZyXEL U-1496E Plus ZyXEL U-1496 Plus Enhanced Top 10 List	November 1992 ZyXEL U-1496 ZyXEL U-1496E	Winter 1992 ZyXEL U-1496 Awarded 5 NeXT WORLD Cubes	June 1993 ZyXEL U-1496E	ZyXEL U-1496E Plus	ZyXEL U-1496E	June 29, 1993 ZyXEL U-1496 Plus	February 1993 ZyXEL U-1496E Plus

Low Prices On High Speed Modems



ZyXEL U-1496 Plus

- ***ZyXEL's*** 19.2Kbps Ultra High Speed
- 14.4Kbps Transmission Speed For Data/Fax
- Remote Configuration
- All ***ZyXEL*** Standard & Intelligent Features

$629

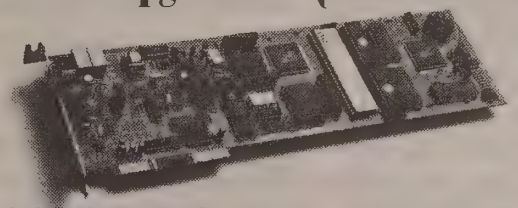
ZyXEL U-1496E Plus

- ***ZyXEL's*** 19.2Kbps Ultra High Speed
- LED Indicators With Voice/Data and Answer/ Originate Switches
- 2 Wire Dial-Up/Leased Lines

$409

ZyXEL Introduces...

- It's New U-1496P Portable Modem with Cellular Capabilities
- VoiceFax Software in DOS, Mac and Windows Versions
- V.34 Upgradable (After the standard is finalized)



U-1496B P.C. Plug-In-Card

- 16.8Kbps Data & 14.4Kbps Fax

$279

U-1496E External Modem

- 16.8Kbps Data & 14.4Kbps Fax

$289

ZyXEL - The Price/Performance Leader In High Speed Modems

With ZyXEL's ultra high speed modems, you will save time, effort and money.

Save time with speeds up to 19.2Kbps (Plus Series) and 16.8Kbps (U-Series and Portable). Save effort with intelligent features like remote configuration and fast retrain. Save money with ZyXEL's new lower prices.

Leading industry publications are giving ZyXEL modems rave reviews for their top performance. ZyXEL's ultra high speed modems with data/fax/voice are packaged to fit a variety of configurations, giving you the most intelligent features for less.

ZyXEL modems are intelligent enough to work in all environments including DOS, Windows, OS/2, Macintosh, NeXT, UNIX and Amiga.

What more could you ask for in modem technology? Once the standard is finalized, send in your modem for a V.34 upgrade (starting at $249) and work V.faster. A five year warranty is standard on ZyXEL's U-Series and Plus Series modems. Rackmounts come with a two year warranty.

Call today to make a wise investment. ZyXEL - The Intelligent Modem.

For more details call Magictek! (714)939-9220

ZyXEL's VoiceFax Software and ZyVoice Switch Box are Being Offered Together in One Package!

ZyXEL's new **VoiceFax** Software integrates data*, fax and voice answering machine capabilities on one phone line. This software can be used in the Dos, Windows or Macintosh environments. (*Data for DOS version only.)

The **ZyVoice** Switch Box allows you to record and play back voice mail messages easily and effectively with superior voice quality!

Only $45!

LOCAL AREA NETWORKING Interface Cards & Accessories

JUST ADDED! NETWARE

3.12	5	User	$590
3.12	10	User	1295
	25	User	1875
	50	User	2575
NetWare Lite			85
Lantastic AI 5.0			85

ETHERNET ADAPTERS ALL MAJOR BRAND NAMES AVAILABLE PLEASE CALL!

Ethernet Card for PS/2 50, 60 & 80	175
Pocket Ethernet	175
16 Bit Ethernet Cox 10 Base-T Combo	65

ARCNET ADAPTERS

8 Bit Arcnet/Star/Coaxial	$40
8 Bit Arcnet/Bus/Coaxial	45
8 Bit Arcnet/Bus/Twisted Pair	60
16 Bit Arcnet/Star/Coaxial	65
16 Bit Arcnet/Bus/Coaxial	75
Window Work Group	CALL

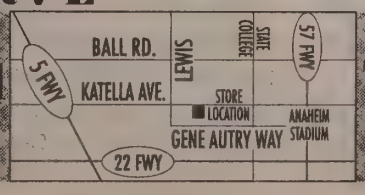
ARCNET/ETHERNET HUBS

Arcnet 8 Port Active Hub	$145
Arcnet 4 Port Active Hub Card	65
Arcnet 4 Port Passive Hub	15
Arcnet 8 Port Twisted Pair Active Hub	145
8 Port ETHERNET 10 BASE-T Concentrator	275
12 Port ETHERNET 10 BASE-T Concentrator	425

(Prices subject to Change Without Notice.)

TWO LOCATIONS TO SERVE

1218 E. KATELLA, ANAHEIM, CA 92805
TEL: 714/939-9220 • FAX: 714/939-9221
MAGICTEK COMPUTERS



188 TECHNOLOGY DR., SUITE J, IRVINE, CA 92718
TEL: 714/753-1818 • FAX: 714/753-1809
MPC COMPWORKS INC.

Continued from page 118

CD-ROM Reviews

TURBOTAX DELUXE CD-ROM EDITION FOR WINDOWS

Published By: Chipsoft
List Price: $60
Reviewed By: Woody Liswood

February probably wasn't the best time to introduce a new tax product, but if you are running a Multimedia PC with CD-ROM, this new version of Turbo Tax for Windows contains more information than you might imagine bundled on a single disk.

The normal TurboTax program is here. This version is identical, as near as I can tell, to the floppy disk-based product.

The CD-ROM includes Marshall Loeb's *Video Tax Guide*. If you have a question, Loeb appears in a video window, presenting a short lecture about your inquiry. The advice, as you might expect, is rather general and may not apply to your specific situation. But, hey, this is easier than reading a book offering the same thing.

A version of J.K. Lasser's popular *Your Income Tax* books are also included. In them you will probably find the more specific answer to your tax questions.

The CD-ROM also contains the early versions of the state tax information. There is a reply card for getting the final version for your state. I sent my card in and received the disks back within eight working days.

The TurboTax Tax Planner lets you play "what if" with your tax strategies and look up to five years into the future. For example, you can look at the difference between filing individually or jointly, assuming you have that choice.

There is also a TurboTax Tax Savings Guide that gives tips which may help you save some of your hard-earned money.

Lastly, if you are into federal government instructions, you can get, on-screen, the specific IRS instructions for every topic and the appropriate forms.

Chipsoft has taken a major step in the CD-ROM direction with this product and I expect it will get even better in the years ahead. Now, if it would only do my taxes for me. (Chipsoft, Inc., 6330 Nancy Ridge Dr., Suite 103, San Diego, CA 92121-3290. 1-800-756-1040)

QUICKEN FOR WINDOWS CD-ROM DELUXE EDITION

Published By: Intuit
List Price: $124.95
Reviewed By: Woody Liswood

Quicken is known for being the best-selling personal finance program and Quicken for Windows CD-ROM Deluxe Edition will probably keep that reputation intact.

In addition to the standard Windows version of Quicken, the CD-ROM includes Quicken Companion, comprised of Quicken Home Inventory, Quicken Tax Estimator, Quicken Tips, and Quicken Quotes.

If you don't already have Home Inventory, it is something you will want to use immediately. It lets you build, step by step, a complete inventory of everything you own. When you finish, save everything on a floppy, and put it in a safe deposit box. If misfortune strikes, you will have a record of all the information you will need to handle your insurance nightmares.

The CD-ROM also contains the Tradeline Electronic Stock Guide. If you like tracking and charting information on six thousand stocks over the past twelve months, pegged to 130 stock market indicators, this is for you. Updates are available on a monthly and quarterly basis.

There is a variety of US Government publications dealing with small business and personal finance, including information about the Fair Credit Reporting Act; Consumer Handbook to Credit Protection; A Guide to Business Credit for Women, Minorities, and Small Businesses; Starting and Managing a Business From Your Home; A Retirement Guide: Defined Contributions Plans; and more.

You will also find *The Wall Street Journal Video Guide to Money and Markets*. I had fun, here, fooling with the video, and looking and listening rather than staring and reading. (Intuit, Inc., 66 Willow Place, PO Box 3014, Menlo Park, CA 94026-3014)

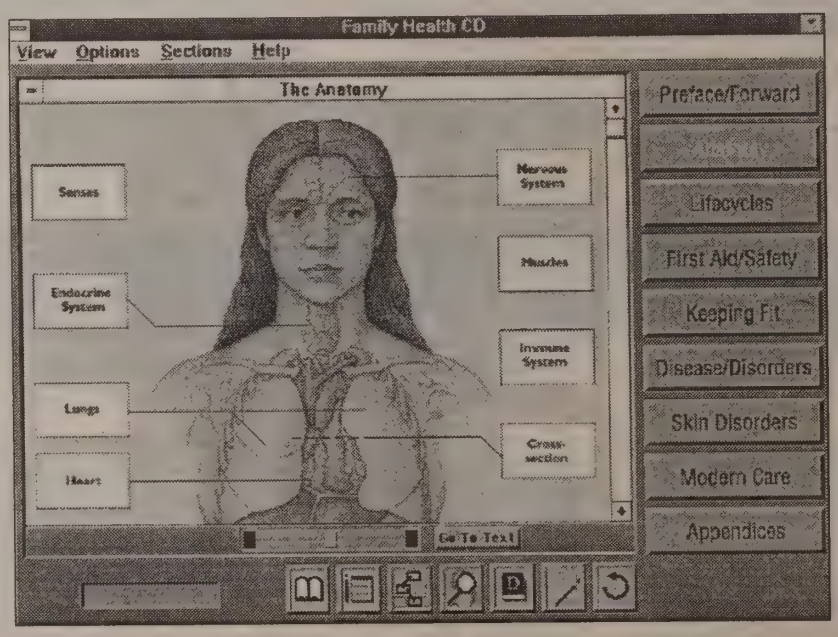
MAYO CLINIC FAMILY HEALTH BOOK—INTERACTIVE EDITION

Published By: Interactive Ventures
List Price: $99.95
For: Macintosh
Reviewed by: Matthew Leeds

With an excellent pedigree (Mayo Clinic for source material, Sony Electronic Publishing for distribution, Clement Mok for interface design), Interactive Ventures' first Macintosh title has a lot to live up to. Converted from the 1378-page book, this CD-based product contains all the text material of the book plus forty-five animated illustrations, five hundred color stills, ninety minutes of audio, hyperlinks, and full text search capabilities.

Designed as an easy-to-use family reference, the Mayo Clinic Interactive CD covers first aid, exercise and fitness, pregnancy, newborn and infant care, nutrition and health, heart disease, cancer, special problems of the elderly, and infectious diseases. The interface is a classic outline form with hypertext links. The great strength of this CD is in the depth of material as well as the interface access to that material.

For example, there is a section of the CD where you can interactively explore the human body, working through the layers of anatomy while gaining information on the physiology of the body. The Family Health Book is the first in a series of health and medical CDs planned by Interactive Ventures. This is one of the few reference CDs I've found usable as well as useful. (Interactive Ventures, 1380 Corporate Center Curve, #305, Eagan, MN 55121) ■



Below: Mayo Clinic Family Health Book CD-ROM brings this anatomy lesson to life with animation and sound.

LAN PRODUCTS 1-800-FOR-LANS

Vesa Local Bus Ethernet adapter $115

Ethernet 100 Mb/s ISA Adapter $199

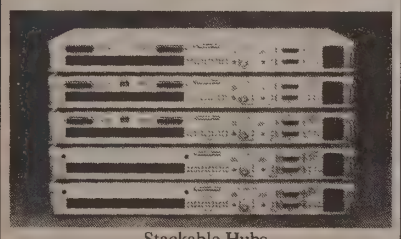
Intel Ether Express 16 $65

Combo Pocket Adapter $99

ETHERNET HUBS

Stand alone Hubs

8 Port 10BT Hub, BNC	$160
8 Port 10BT Hub, BNC & AUI Ports	$180
9 Port 10 BT Palm Hub	$175
12 Port 10BT Hub, BNC & AUI ports	$320
16 Port 10BT Hub, BNC	$280
16 Port 10BT Hub, BNC & AUI Ports	$380
6 Port Hub, Fiber Optic Ports SNMP Controlled	$1249
8 Port Hub, BNC SNMP Controlled	$899



Stackable Hubs

Basic Hub 12 10BT+2AUI+1BNC	$599
SNMP Controlled Hub 12 10BT+2 AUI+1 BNC	$795
SNMP Master Hub	$995

TRANSCEIVERS

AUI to TP	$39
AUI to BNC	$39
AUI to Fiber Optic	$220

POCKET LAN ADAPTERS

Pocket Ether TP+BNC	$99
PCMCIA IC Lan Card BNC or UTP	**$170** NEW

REPEATERS

Ether 2 : 2 BNC+2 AUI Ports	$185
Ether 4 : 4 BNC+4 AUI Ports	$310
Ether 6 : 6 BNC+1 AUI Ports	$430

RAID SOLUTIONS

MICROPΩLIS

RAIDON LT 1120 Disk Array Kit with Novell configuration kit	$4495
RAIDON LT 2100 Disk Array with Novell configuration kit	$5595

TAPE BACKUP SYSTEMS

COLORADO MEMORY SYSTEMS

Jumbo 250 DJ-20 Int.	$182
Power Tape 2Gb SCSI W/control Internal/External	$1045/1199
Power Tape 4Gb SCSI W/control Internal/External	$1620/1830

NETWORK SOFTWARE

NOVELL NetWare

NetWare Lite V1.1		$53
- V2.2	5/10 User	$469/1049
- V2.2	50 User	$2079
- V3.12	5/10 User	$599/1299
- V3.12	25/50 User	$1895/2519
- V4.01	5 User - CD ROM	$899
- V4.01	10 User - CD ROM	$2025
- V4.01	25 User - CD ROM	$2975
- V4.01	50 User - CD ROM	$3599
- SFT3 V3.11	5/10 User	$1610/2500
- SFT3 V3.11	25/50 User	$3326/4825
- SFT3 V3.11	100/250 User	$6928/11968
NetWare Multiprotocol Router		$640
NetWare Multiprotocol Router Plus		$960
NetWare Connect 2 Port		$380
NetWare Connect 8 Port		$1400
NetWare Video Server 5 User		$950
NetWare Video Server 10 User		$1495

Call for Upgrades

ARTISOFT

LANtastic/AI 5.0 Win Single	$76
LANtastic/AI 5.0 Win 6 Pack	$509
LANtastic/AI 5.0 Win 12 Pack	$978
LANtastic/AI 5.0 DOS Single	$68
LANtastic/AI 5.0 DOS 6 Pack	$430
AE-2 16 Bit Ethernet Adapter	$199
16 Bit LANtastic Compatible Adapter	$50

ETHERNET ADAPTERS

Intel Ether Express 16 BNC	$65
3Com Etherlink III 10BT 5/20 Pack	$104 $495/1799
Eagle Etherxpert-16 TP, (5 Pack)	$375
Ether-16T TP - Jumperless, NE-2000 Comp.Novell Approved	$37
Ether-16C Coax - Jumperless, NE-2000 Comp.Novell Approved	$37
Ether-16CT BNC+TP - Jumperless, NE-2000 Comp.Novell Approved	$41
Ether-32CTA Combo, 32Bit EISA	$199
4 Ports Internal Repeater TP+BNC	$159
4 Port Expansion card	$59
Vesa LocalBus Ethernet adapter	$115

100 Mb/s Fast Ethernet

Compatible with cat. 3 or higher existing 4 Twisted Pair Cable
RJ45 Connectors, Novell Certified

Ether-100-ISA Adapter	$189
Ether-100-EISA Adapter	$315
8 Port Concentrator	$720
2 Port Repeater	$352

LOCAL & REMOTE BRIDGES

Local Bridge	$599
Local Bridge with SNMP	$1395
Remote Bridge with SNMP up to 64Kbps	$1595
Remote Bridge with SNMP up to 2.048Mbps	$2195
Remote Compression Bridge high speed synch. data up to 256Kbps	$1795
Remote IP Router with Bridging Capabilities	$1595

gandalF

LANline 5242, ISDN Remote Bridge ISDN "U" Interface (Direct Connection to ISDN), 128 Kbps Throughput Plus 4:1 Compression $799

LANline 5220, High performance Remote Bridge, Dual WAN Links, Data Compression upto 8:1, Throughput of upto 1,024 Mb/s using standard 64Kb/s digital circuits $1700

LANline 5210 Micro Ethernet Bridge $349

5240/5220 Optimizer CALL

Gandalf Central Site Concentrator CALL

PRINT SERVERS

West Hills PrintMate 3000 **$299** NEW
2 Parallel Ports, 1 Serial Port
BNC, AUI and RJ45 Connection
2 Year Warranty

Castelle Lanpress2P2S BNC or RJ45	$525
Intel Netport BNC or RJ45	$439
Eagle NPE 400 Pocket Server	$370

PCI Ethernet Card
Coming in MAY

STARTER KITS

Easy to use starter Kits let you create networks from 2 to 10 users

NOVELL PERSONAL NetWare

2 User Netware Starter KIT **$190** NEW
2-Novell Personal NetWare
2-16 Bit Combo Adapter
1-25FT. Length RG58A/U Coax
2-52 Ω Terminators

5 User Netware Starter KIT NEW
1-Novell NetWare 5 User — Personal NetWare
5-16 Bit Combo Adapter
1-Crimp Tool
10-BNC Connector
2-52Ω Terminator
1-500 FT. Spool RG58A/U
$490 Novell 3.12 **$999**

100 Mbps Starter KIT
100 Mbps "Fast Ethernet" LAN Adapter and Novell DOS 7 in One Convenient Package
LAN Adapter Bundle includes everything needed for "Fast Ethernet" Network Node CALL

NOVELL CERTIFIED WORKSTATIONS & FILE SERVERS

Workstation 486-SX25
2MB Ram, 16Bit Ethernet Card
1.44FDD, IDE IO
Mono-VGA Card&Monitor $660

Workstation 486-SX25
2MB Ram, 16Bit Ethernet Card
1.44FDD, IDE IO, 80MB HD
.28 SVGA Monitor
1 MB VGA Card $995

486-DX33 VL Fileserver Full tower
128K Cache, 4MB Ram, 1.44FDD
Mono VGA, 250MB HDD
VL Disk Controller
2 Printer Ports $1279

486-DX66 VL Fileserver Full tower
256K Cache, 8MB Ram, 1.44FDD
Mono VGA, 420MB HDD
VL Disk Contr.
2 Printer Ports $1839

Pentium PCI
256 Cache, 60 MHz Pentium CPU
8 Meg. RAM, 3 PCI Slots
Floppy & IDE on Motherboard
Full size Tower case
FCC Class B $1695

All Novell Certified (Barebone)
All FCC Class B Approved
All 101 Enhanced Keyboard

VISA & MASTERCARD

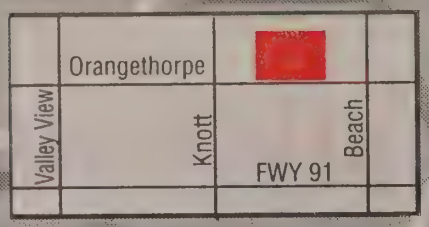
POLICIES...
30 day evaluation period from invoice date. Products must be returned in new condition with all manuals, boxes and material originally received.
Prices, specifications and availability subject to change without notice

Fast Delivery
Most Orders Ship the Same Day

1-800-FOR-LANS
1-800-367-5267
For Technical Support call
1-818-773-8171
Fax: 1-818-773-0261

WEST HILLS LAN SYSTEMS

Hours:
Mon.-Fri. 10:00am-6:00pm
Sat. 10:00am-5:00pm
Sun. & Holidays Closed



7033 Orangethorpe Ave.,
Unit A, Buena Park, CA 90621

NET

CALL US AT:
(714) 523-2367
FAX: (714) 523-2625

HIGH PERFORMANCE local bus systems

VESA

- 4MB RAM, 70ns
  INTEL Pentium overdrive ready
  3 VESA local bus slots
- 128K Cache
- 1.2MB and 1.44MB floppy drives
- 250MB IDE hard drive
- Fast 32bit VESA local bus SVGA card 1MB,
  16 million colors
- Fast 32bit VESA local bus IDE controller
- 14" SVGA monitor with .28 dot pitch
- 2 serial/1 parallel/1 game ports
- Minitower
- 101 enhanced keyboard

INTEL

Price	Regular	CASH
486SX-25MHz	$1050	$975
486SX-33MHz	$1100	$1025
486DX-33MHz	$1230	$1155
486DX2-66MHz	$1370	$1295

AMD

Price	Regular	CASH
486DX-40MHz	$1200	$1125
486DX2-66MHz	$1340	$1265

PCI

- 4MB RAM, 70ns
  INTEL Pentium overdrive ready
  3 VESA local bus slots
- 128K Cache
- 1.2MB and 1.44MB floppy drives
- 250MB IDE hard drive
- Fast PCI local bus SVGA card 1MB, 16 million colors
- Fast PCI local bus IDE controller
- 14" SVGA monitor with .28 dot pitch
- 2 serial/1 parallel/1 game ports
- Minitower
- 101 enhanced keyboard

INTEL

Price	Regular	CASH
486SX-25MHz	$1100	$1125
486SX-33MHz	$1250	$1175
486DX-33MHz	$1380	$1305
486DX2-66MHz	$1520	$1445

PENTIUM

Price	Regular	CASH
Pentium 60MHz	$2099	$1999
Pentium 66MHz	$2259	$2159

BEST BUY!

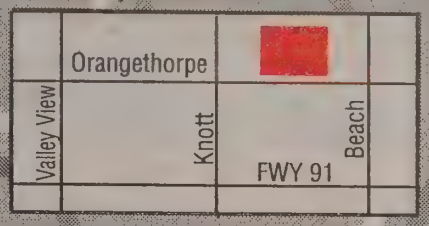
VISA MasterCard DISCOVER

Financing Available

ALL SYSTEMS CARRY FULL 1 YEAR

COMPUTER

Hours:
Mon.-Fri. 10:00am-6:00pm
Sat. 10:00am-5:00pm
Sun. & Holidays Closed



CALL US AT:
(714) 523-2367
FAX: (714) 523-2625

7033 Orangethorpe Ave.,
Unit A, Buena Park, CA 90621

INTEL PENTIUM PERFORMERS
Ultra-Fast PCI Systems

- 4 PCI slots, 4x16 bit ISA slots
- 256K Cache
- 8MB RAM, upgradable up to 192MB
- 1.2MB & 1.44MB floppy drives
- 420MB IDE hard drive
- Fast PCI SVGA card with 1MB, 16 million colors
- Fast PCI IDE hard drive controller
- 15" SVGA color monitor, 1280x1024 N.I., flat screen digital controls, .28 dot pitch
- 2 serial/1 parallel/1 game port
- Mid-tower case
- 101 enhanced keyboard

PRICE	Regular	CASH
Pentium PCI 60MHz	$2599	$2499
Pentium PCI 66MHz	$2759	$2659

This Month's Special!

HIGH POWER Multimedia System

- 3 VESA local bus slots
- 128K cache
- 4MB RAM
- 1.44 floppy drive
- 250MB IDE hard drive
- Fast VESA local bus SVGA card with 1MB
- Fast VESA local bus IDE HD/FD controller
- 14" SVGA monitor, .28 dot pitch
- Double-speed CD-ROM drive
- Sound Blaster 16 sound card
- A pair of speakers
- 2 serial/1 parallel/1 game port
- Minitower
- 101 enhanced keyboard
- High resolution serial mouse

PRICE	Regular	CASH
INTEL 486DX2-66MHz	$1645	$1545
INTEL 486DX-33MHz	$1525	$1425

DISCOVERY CD 16 MULTIMEDIA KIT

Sound Blaster 16 sound card
Creative Double Speed CD-ROM
Stereo Speaker

5 CD Titles
Aldus PhotoStyler SE
The Animals
Multimedia Encyclopedia
Just Grandma and Me
Where in World Is Carmen San Diego

$335

MOTHERBOARDS (OK, with CPU)

	regular/CASH
INTEL PENTIUM PCI (4 PCI Local Bus slots)	
P5 66MHz with 258K cache	$1200/$1175
P5 60MHz with 256K cache	$1150/$1125
INTEL 486 PCI (3PCI local bus slots)	
486 DX2-66MHz with 128K cache	$640/$625
486 DX-33MHz with 128K cache	$505/$490
486 SX-33MHz with 128K cache	$370/$360
486 SX-25MHz with 128K cache	$320/$310
INTEL 486 VESA Local Bus (3 Vesa Local Bus slots, Pentium P24T ready)	
486 DX2-66Mhz with 128K cache	$485/$470
486 DX-33Mhz with 128K cache	$345/$330
486 SX-33Mhz with 128K cache	$210/$200
486 SX-25Mhz with 128K cache	$160/$155
AMD 486 VESA Local Bus (3 Vesa Local Bus slots, Pentium P24T ready)	
486 DX2-66MHz with 128K cache	$450/$435
486 DX-40MHz with 128K cache	$310/$300
486 VESA local bus motherboard with 128K cache, NO CPU	$95/$90
from 128K cache to 256K cache upgrade on motherboard	$20/$20
386 DX-40Mhz with 64K cache	$120/$115
386 SX-40Mhz	$80/$75
1MB SIMM modules	CALL
4MB SIMM modules	CALL

ADD-ON CARDS

	regular/CASH
PCI Local Bus Add-on Boards	
Diamond *Viper* PCI, 2MB VRAM (16.7 mil. colors)	$390/$380
Cirrus Logic PCI, 5428 chipset, 1MB RAM (16.7 mil. colors)	$150/$145
IDE hard drive controller	$47/$45
VESA Local Bus Add-on Boards	
Diamond *Stealth 24VLB*, 1MB SVGA card (16.7 mil colors)	$175/$165
Diamond Viper VLB, 2MB VRAM SVGA card (16.7 mil colors)	$360/$350
Trident, 9400 chipset, 1MB SVGA card (16.7 mil. colors)	$80/$78
Cirrus Logic, 5424 chipset, 1MB RAM (16.7 mil. colors)	$80/$78
IDE controller with AT I/O, 2 serial, 1 parallel, 1 game ports	$30/$28
IDE cache controller (4HD/2FD, 512K to 16MB w/OK)	$190/$180
NE2000 Ethernet card, 10BaseT	$190/$185

ISA Add-on Boards	regular/CASH
Trident SVGA card with 1MB, 16 million color	$60/$57
16bit NE2000 Ethernet card	$80/$77
16bit NE2000 Ethernet card, 10BaseT	$85/$82
Super IDE (2HD/2FD with 2s, 1p, 1g)	$18/$17
Sound Blaster Pro Deluxe	$125/$121
Sound Blaster 16 Basic	$140/$130
2400 baud internal modem	$35/$33
9600/2400 baud internal fax/modem	$48/$45
14,400 baud internal fax/modem, v.32bis, v.42bis	$135/$130

MONITORS

14" Impression 3 SVGA monitor, .28dp, 1024x768	$235/$225
14" Impression 3+ SVGA monitor, .28dp, 1024x768 N.I.	$260/$250
14" Impression 3n+ SVGA monitor, .28dp, 1280x1024 N.I., VESA	$280/$270
15" Impression 5 multi-freq. monitor, .28dp, 1280x1024 N.I., digital controls, flat screen, green PC ready	$390/$375
17" Impression 7 multi-freq. monitor, .26dp, 1280x1024 N.I., digital controls, flat screen, green PC ready	$700/$685
17" Sceptre CL-617 SVGA monitor, .26 dot pitch, flat screen, 1280x1024 N.I., flicker free 72Hz refresh, with digital auto-tracking	$750/$720

FLOPPY & HARD DRIVES

TEAC 1.2MB 5 1/4" FDD	$50/$48
TEAC 1.44MB 3 1/2" FDD	$42/$40
TEAC 2.88MB 3 1/2" FDD	$110/$105
Samsung 1.2MB 5/14" FDD	$46/$44
Samsung 1.44MB 3 1/2" FDD	$39/$37
170MB, Samsung 3171A IDE HD (13ms, 64K cache)	$190/$180
250MB, Samsung 3122A IDE HD (16ms, 64K cache)	$230/$220
340MB, Samsung 3172A IDE HD (13ms, 64K cache)	$265/$255
250MB, Conner CD-30254 IDE HD (14ms, 64K cache)	$235/$225
340MB, Conner CD-30340 IDE HD (12ms, 64k cache)	$275/$265
420MB, Conner CD-420A IDE HD (14ms)	$320/$310
245MB, Maxtor MX-7245A IDE HD (15ms, 64K cache)	$245/$235
340MB, Maxtor MX-7340A IDE HD (13ms)	$285/$275
535MB, Maxtor LXT-535A IDE HD (12ms)	$470/$460
1.2 GIG, Toshiba fast SCSI-2 HD (12ms)	$825/$805
250MB, Conner 250 Tape Backup System	$160/$155
Panasonic *Double spin* CD-ROM drive (300K/s, 320ms)	$190/$180

PRINTERS

	regular/CASH
Hewlett Packard DeskJet 500C Color InkJet printer	$365/$355
Hewlett Packard DeskJet 560C Color InkJet printer	$550/$530
High capacity print cartridge for HP 500 family	$34/$33
Hewlett Packard LaserJet 4	$1335/$1300
Hewlett Packard LaserJet 4P	$940/$910
Hewlett Packard LaserJet 4L	$650/$630
Panasonic KX-P2123 Quiet Printer (24pin/240cps/80col/color opt)	$240/$230
Color kit for the above printer	$45/$43

KEYBOARDS

Lite-On 4100 101 enhanced keyboard (non-click)	$22/$21
AST KB-101 enhanced keyboard (non-click)	$40/$37
Focus 2001 101 keyboard (click, hard dustcover)	$42/$40
KME keymouse 101 keyboard (click, track-ball built-in)	$62/$60

CASES

CPU cooling fan (INTEL 486)	$18/$17
Mini-tower case (200w ps)	$45/$43
Mini-desktop case (200w ps)	$65/$62
Mid-tower case (230w ps)	$69/$67
Full-tower case (250w ps)	$89/$87

MOUSE/TRACKBALL

Serial mouse, M.S. compatible, 3 buttons	$20/$19
TrueDox Trackball (50-800 dpi, 3 button)	$35/$33
Microsoft serial mouse	$53/$50
Microsoft bus mouse	$65/$63

VISA
MasterCard
DISCOVER

PARTS & LABOR WARRANTY!

Note: The above prices do not include CA sales tax and/or shipping and handling charges if any are applicable. Regular prices reflect credit card (Visa, Mastercard) and check prices. Cash price reflects discount price for cash purchase. Above price is subject to change w/out notice.

Financing Available

continued from page 26

DONATE OLD PCs TO LOCAL LIBRARIES

Libraries are the traditional community facilities for assuring equal access to knowledge. They are the obvious choice to provide free tele-ports into the exploding national information infrastructure—reducing disparity between the computer-equipped and the computer-poor.

But the libraries themselves are poor. "Poor," hell—they're broke! And there are no politically irresistible librarians' unions donating tens of millions of dollars to politicians and ballot campaigns to assure that libraries get a fair chunk of the tax patronage. What they get, they get because most politicians *are* well meaning and *do* care for libraries' well-being and public service.

So let's give new meaning to "PC"—"political correctness" worth doing: Offer your perfectly good, but unacceptably old PCs and Macs to your local library, along with last year's modems and last rev's software.

They may be too old for us techno-elite, or too slow to download those important color GIF files. But libraries can use 'em to provide powerful on-ramps to the nation's data highways for those who must otherwise limp along on pre-landfill ex-forests: the information-impaired, ill-equipped to knowledgeably participate in crucial community decision making (e.g., in the voting booth).

THE HORSE'S MOUTH

I'll be speaking about "Computer Software and Patent Issues" during the April 22 Patent-Office-at-Stanford conference at Stanford Law School; "Electronic Public Access to Government" before San Francisco's Commonwealth Club, May 5 at 5 pm (415/597-6700); about civic networking in Apple's "Building Community Computing Networks," May 4–6 in Cupertino (sadly, already sold out); and, at the June 17 Peninsula CivicNet '94 Symposium (see sidebar). ■

Warren organized and chaired the landmark First Conference on Computers, Freedom & Privacy (1991), was one of the first to receive the Electronic Frontier Foundation Pioneer Award (1992), led the recent successful effort to make state legislation and statutes available via the public nets without state charge, and received the James Madison Freedom-of-Information Award from the Society of Professional Journalists, Northern California (1994).

He founded InfoWorld, *Wireless Digital, Initiative, Inc., and one of the nation's largest public microcomputer conventions. He was founding host of PBS's* Computer Chronicles, *founding editor of* Dr. Dobb's Journal, *and has chaired various trade and professionals' organizations. He holds graduate degrees in computing (Stanford), medical information science (UC Medical Center), and mathematics & statistics. He has been a computer professional since 1968, and was a mathematics teacher and professor for ten years before that. He is also an outside member of Autodesk's board of directors and, among other things, formulated their policy statement strongly opposing the patenting of software.*

A Herd Of
ACTION ALERTS!
Support Needed To Open Public Records

Four bills in the California Legislature need widespread public support (copies of latest bill text is available from the bill authors, and online via ftp from leginfo.public.ca.gov). All have a good chance of passage in this election year, *if* they receive extensive support from individuals and organizations.

Assembly Bill 2524, Bowen, access to computerized local public records. Last year, Assembly Member Debra Bowen's AB 1624 blew open the Legislature's computerized public records for public access without state fees via the nonproprietary computer nets. Now she wants computerized local-agency public records to be available to the public in computerized form, for no more than "fees covering the direct costs of duplication..." Many agencies currently stonewall requests for computer copies of their computerized public records. Even worse, some local agencies with and without private-sector monopoly partners are charging huge mark-ups for modern/computerized copies—limiting access to those wealthy enough to afford them. Widespread public pressure is needed to overcome profiteers' whines. Send support letters to Bowen, fax (916)327-2201, and to your own legislators. Voice calls to Aide Mary Winkley, (916)445-8528.

Assembly Bill 2451, Bates, online access to state public records. Assembly Member Tom Bates has introduced legislation modeled after Bowen's AB 1624, to make computerized executive branch state public records available without state fees via the Internet, just as legislative branch records are now available. With enough public pressure, it appears that Bates can override state agencies' probable opposition (some make big bucks selling computer copies). Send support letters to Bates, fax (916)445-6434, and to your own legislators. Aide Rachel Richman, (916)445-7554.

Senate Bill 758, Hayden, computerized campaign-finance disclosures. More than a year ago, Sen. Tom Hayden introduced this campaign-reform bill. It was mostly gutted as it bounced through the legislative process. However—long before this alert appears—he will have amended it to authorize and mandate that political candidates and campaign committees receiving more than $10,000 per year must file their financial disclosures in computerized form, and mandate that the secretary of state make such electronic records available to the public. This needs as much public pressure in this election year as it can get. Send support letters to Hayden, fax (916)324-4823. Aide Daryl Young, (916)445-1353.

Assembly Bill 3575, Speier, computerized lobbyist disclosures. Last but not least, Assembly Member Jackie Speier has introduced this legislation as a companion to Hayden's bill, placing the same computerized-filing and computerized public-access requirements on state lobbyists' required disclosures as SB 758 places on campaign-finance disclosures. Pressure's needed to overcome shy lobbyists' opposition. Send support letters to Speier, fax (916)445-0511. Aide Elise Thurau, (916)445-8020.

Peninsula CivicNet '94 Symposium

An all-day symposium about computer-based community and civic networking on the San Francisco Peninsula will be held at the College of San Mateo in San Mateo on Friday, June 17. Presentations will be tutorial and organizational rather than primarily technical—for interested citizens and those who are creating or planning computer-based community services. Topics will include current and planned and possible Peninsula civic-nets, services, problems, benefits, opportunities, etc.

At this too-early press deadline, event sponsors include community groups, libraries, schools, and county agencies. Warren Slocum, San Mateo County's assessor-clerk-recorder, and I are cochairing the event.

For information or registration, contact Symposium Administrator Ruth Nagler, c/o Peninsula Library System, 25 Tower Rd., San Mateo, CA 94402; (415)345-1221 or (415)349-5538.

– Jim Warren, columnist & advocate

KAMFOZ Computer

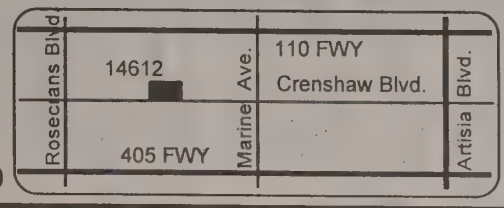
CALL: 310-769-1970

Dealer inquires welcome

Not responsible for typo.
All product names are trademarks of their respective companies.

All systems come with a one year warranty, extended support & service option available.

14612 Crenshaw Blvd. Gardena, CA 90249 ☆ Phone (310) 769-1970 ☆ Fax (310) 523-9190



THIS WEEK SPECIAL

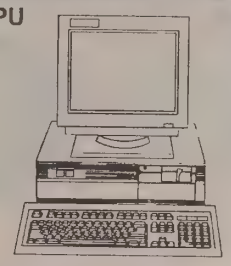
VLB 486-66 MHZ DX2 INTEL CPU 256 CACHE, 3 VLB SLOT, PENTIUM OVER DRIVE READY, UPGRADE TO 64MB RAM	$499.00
CONNER 1.06GB SCSI HARDRIVE	$739.00
CONNER 540MB IDE HARDRIVE	$369.00
W.D. 420MB IDE HARDRIVE	$279.00
VLB AT I/O + IDE CARD 2S-1P-1G-2HD-2FD	$ 25.00
VLB SVGA 1024X768 IMB VIDEO CARD	$ 69.00
SVGA MONITOR .28 NI 1024X768	$219.00
PANASONIC 1130 DOTMATRIX PRINTER	$129.00
FAX/MODEM CALCOM 9600/2400 S/R INT	$ 39.00
KEYBOARD B.T.C. 101 KEYS	$ 17.00
SCANNER UMAX UC630, MX RESOLUTION 1200X1200 COLOR, W/SCSI INTERFACE, INCLUDED: ADOBE PHOTOSHOP,OCR	$679.00
TEXEL EXTERNAL CD ROM SCSI	$239.00

ECONOMICAL BUILT YOUR OWN SYSTEM

These items consisted in one complete system

Prices $?
Do your own calculation

- Mother board W/CPU
- Ram (Memory)
- IDE Hard Drive
- 1.2 & 1.4 Floppy
- A/T I/O+IDE Card
- S.V.G.A. Card
- 101 key board
- Mini tower case
- Monitor



MOTHER BOARDS WITH CPU

ISA 386-40SX MHZ	$69.00
ISA 386-40DX 128K CACHE	$95.00
ISA 486-40DLC 40MHZ W/128K CACHE W/MATH CO. (Cache upgradable)	$179.00
VLB 486-40 DLC 40MHZ 256K Cache w/math co	$220.00
VLB 486-SX w/Intel CPU 0K Cache (256K Cache upgradable)	$155.00
ISA 486-33 MHZ TI CPU	$ 97.00
ISA 486-SLC2 66MHZ IBM	$239.00
VLB 486-SLC2 66MHZ IBM W/64K Cache	$295.00
VLB 486DX-33/50/50DX2/66DX2 INTEL CPU Pentium Over Drive ready, upgrade up to 64MB Ram, 256K Cache, 3 VLB slot	$369/$489/$389/$499

VIDEO CARD

VGA 256K Video Card	$ 29.00
VGA 512K Video Card	$ 39.00
SVGA 1 MB Video Card	$ 59.00
SVGA 1 MB VLB Video Card	$ 79.00
Diamond Stealth 24bit VLB w/1MB Ram	$159.00
Diamond Stealth 24bit VLB w/2MB Ram	$299.00
Diamond Viper 24bit VLB w/2MB Ram	$369.00
Orchid Celsius VLB 1 MB (to 2MB)	$182.00
Orchid Farenheit VLB & ISA 1 MB (to 2MB)	$159.00
Orchid Kelvin64 w/1MB (to 2MB)	$149.00

NETWORK CARD

NE-2000 16bit PCMCIA Card.	$189.00
16 Bit 2in1 NE-2000 Compatible BNC/TP/AUI	$ 69.00
32Bit 3in1 VLB w/VLB driver..	$199.00
Pocket size 2in1 BNC/TP	$129.00

MONITORS

12" Monochrome T.TI	$ 89.00
14" Monochrome VGA	$119.00
14" VGA. color monitor	$169.00
14" SVGA .39 1024X768	$189.00
14" SVGA .28 1024X768	$219.00
14" SVGA .28 1024X768 NI EDISON L.R	$249.00
14" SVGA VLB L.R .28 1280x1024 HANA	$239.00
15" SVGA KNITEC/Edison 1280x1024 .28 NI	$349.00
17" SVGA KNITEC 1280x1024 .28 NI	$620.00
17" SVGA EDISON 1280x1024 .28 NI	$599.00

ACCESSORIES

MiniTower case w/ps	$ 39.00
MidTower case w/ps	$ 65.00
Desktop case w/ps	$ 55.00
FullTower case w/ps	$ 75.00
1.2 MB FD 5" 1/4	$ 45.00
1.44 MB FD 3" 1/2	$ 39.00
Key Board 101BTC	$ 17.00
Key Board Focus 2001	$ 39.00
Key Board Focus 8000	$ 45.00
Mouse Generic	$ 9.00
Microsoft mouse 2 buttons...	$ 43.00
120 MB Tape Backup Conner	$119.00
250 MB Tape Backup...."	$149.00

For SCSI & higher capacity tape backup please call:

Multimedia *upgrade kit*

Sony 33A *double speed*

CD ROM Sony double speed 33A, 16 bit Pro Sound card Mediavision Chipset, joystic 4X4 watts Speakers (w/builtin power) 3 Games in disk, 1CD titles. **$299.00**

Panasonic

CD ROM Panasonic 563/562 doublespin, Sound BlasterPro by Creative Lab,1CDtitles, Speakers set **$289.00**

Mitsumi

CD ROM Mitsumi FX001 Double Spin, 16bit Pro Sound card Mediavision chip set, joystick, 1 CD titles 2 games disk, 4X4 Watts Speakers set **$299.00**

CD ROM Drive

CD Rom Panasonic562/563 w/ATcard	$169.00
CD Rom Mitsumi FX001 Double speed With AT Card	$165.00
Toshiba 3401B 200m/s	$345.00
CD Rom NEC SCSI	$289.00
Sony 33A CD ROM double speed	$169.00
Texel external CD Rom SCSI	$239.00

CREATIVE

Sound Blaster Pro ... *by Creative Lab*	$ 98.00
Sound Blaster Pro 16 Bit basic ...."	$149.00
Sound Blaster 16 Bit ASP...."	$179.00

16 bit ProSound Card w/Mediavision chipset, Include 4X4 watts stereo Speaker builtin power,Joystick, 2 games disk. **$148.00**

CD TITLES AVAILABLE

Speakers

SPEAKER NORMAL	$ 12.00
SPEAKER W / 4 WATTS	$ 22.00
SPEAKER W / 35 WATTS	$ 72.00
SPEAKER W / 40 WATTS	$135.00

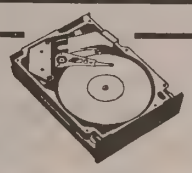
I/O CARD

16bit AT I/O 2S,1P,1G	$ 13.00
16bit AT I/O & IDE 2S,1P, 1G,2HDD,2FDD	$ 16.00
VLB AT I/O & IDE 2S,1P, 1G,2HDD,2FDD	$ 25.80
VLB AT I/O & IDE 2S,1P, 1G,4HDD,2FDD	$ 39.00
VLB AT I/O & IDE 4+4 SUPPORT 2.88 HI/SPD	$ 55.00
VLB AT I/O & IDE W/0K Cache *Promise 4030*	$149.00
VLB 6360 Adaptec SCSI card.	$ 99.00

SIMMS MEMORY

1Meg SIMMS 70ns....	$ 36.00
4Meg SIMMS 70ns....	$159.00
1X3 256K	$ 12.50
1 MB SIPP	$ 39.00

FOR CPU PRICES CALL:



HARD DRIVES

105MB IDE	$165.00
170MB Quantum IDE	$185.00
210MB Conner IDE	$199.00
245MB Maxtor IDE	$224.00
345MB Maxtor/IBM IDE	$265.00
420MB Conner IDE	$279.00
420MB WD IDE	$279.00
540MB Conner IDE	$369.00
540MB WD IDE	$394.00
540MB Conner SCSI	$429.00
1.02GB Quantum SCSI	$799.00
1.2GB Toshiba SCSI	$889.00
1.2GB Quantum SCSI	$989.00
1.8GB Quantum SCSI	$1189.00

FAX / MODEM

2400 Modem Card	$ 29.00
9600/2400 Fax/Modem	$ 45.00
14400 Fax/Modem *Wang*/JVC	$129.00
14400 Fax/Modem Calcom	$ 99.00
9600/2400Fax/Modem PCMCIA	$279.00
14400fax/Modem PCMCIA	$320.00
14400Fax/Modem external by Calcom	$139.00

PRINTER

PANASONIC 1150 9 pin dot matrix	$129.00
CITIZEN GSX230 24 pin	$219.00
Printer cable	$ 7.00
HPIII10 Bubblejet portable	$339.00

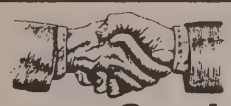
Call for other printers

LASERPRINTER

HEWLETT PACKARD

OKIDATA

Call for latest price



Prompt Service is Our Specialty

Business Hours:
Mon to Fri: 9am to 6pm
Sat: 10am to 4pm

We do Provide:
Maintenance Contracts
Upgrading 386/486 etc...
General Computer Services

We Test & Ship
Mail Order Services,
Over Night Shipment
Facility Available.

RESOURCES

Calendar Of Events

CONFERENCES, SHOWS, AND OTHER SPECIAL EVENTS

APRIL

April 16–17 Computer Show And Sale. Scottish Rite Center, San Diego. MarketPro Shows. Call: (415)456-6730.

April 17 California Computer Show And Sale. Glendale Civic Auditorium, Glendale. Robert Austin Corp.

April 17 NOCCC Computer Fair And Swap Meet. Anaheim Marketplace. North Orange County Computer Club. (714)521-6915.

April 18–21 EMA '94: The Annual Conference And Expo Of The Electronic Messaging Association. Anaheim. EMA. Call: (703)524-5550.

April 19–21 Networks Expo. San Francisco. Smith & Shows. Call: (201)346-1400.

April 23 California Computer Show And Sale. Anaheim Stadium, Anaheim. Robert Austin Corp.

April 24 Computer Show And Sale. Community Center, Oxnard. MarketPro Shows. Call: (415)456-6730.

April 26 Federal On-Site Technology Expo. Oxnard. Federal Business Council, Inc. Call: 1-800-878-2940.

April 27 Federal On-Site Technology Expo. China Lake. Federal Business Council, Inc. Call: 1-800-878-2940.

April 28 Federal On-Site Technology Expo. Twentynine Palms. Federal Business Council, Inc. Call: 1-800-878-2940.

April 30–May 1 Computer Show And Sale. Del Mar Fairgrounds, Del Mar. MarketPro Shows. Call: (415)456-6730.

April 30–May 1 International Computer Show And Sale. Pickwick Center, Burbank. R.G. Canning. Call: (213)587-5100, Event Ext. 4; (909)628-4236, Event Ext. 50.

MAY

May 2–6 Networld+Interop '94 Conferences. Las Vegas. Interop Co. Call: 1-800-INTEROP.

May 4 International Business Mixer. Torrance. Torrance Area Chamber of Commerce. Call: (310)781-9693.

May 7 Computer Marketplace. Earl Warren Showgrounds, Santa Barbara. National Productions. Call: 1-800-800-5600.

May 8 Computer Marketplace. Sequoia Conference Center, Buena Park. National Productions. Call: 1-800-800-5600.

May 8–11 Enterprise PC: Desktop Strategies For The '90s Conference. La Costa Resort & Spa, Carlsbad. Technologic Partners. Call: 1-800-869-6963.

May 13–15 Computer Authority Show. Los Angeles. Merisel, Inc. Call: (516)499-0646.

May 14–15 Computer Marketplace. Pomona Fairplex. National Productions. Call: 1-800-800-5600.

May 15 Computer Show And Sale. Antelope Valley Fairgrounds, Lancaster. MarketPro Shows. Call: (415)456-6730.

May 18–19 Government Technology Conference '94: A Cooperative Vision—Making The Connection. Sacramento. Association of California Government Agencies. Call: (916)363-5000.

May 21 California Computer Show And Sale. Anaheim Stadium, Anaheim. Richard Austin Corp.

May 23–27 DB/Expo. San Francisco. Smith & Shows. Call: 1-800-2DB-EXPO.

May 23–27 Silicon Graphics Expo. San Jose. Silicon Graphics and PCI Trade Show. Call: 1-800-727-EXPO.

May 28 California Computer Show And Sale. Glendale Civic Auditorium, Glendale. Robert Austin Corp.

May 28–29 Computer Show And Sale. Ventura Fairgrounds, Ventura. MarketPro Shows. Call: (415)456-6730.

May 28–29 International Computer Show And Sale. Anaheim Convention Center. R.G. Canning. Call: (213)587-5100, Event Ext. 4; (909)628-4236, Event Ext. 50.

May 29 California Computer Show And Sale. Industry Hills Sheraton, City of Industry. Robert Austin Corp.

APRIL 18

YAMAHA CLINIC

Beverly Garland Hotel, North Hollywood

Yamaha and Goodman Music will be presenting a clinic on two new Yamaha products. The VL-1, dubbed "The World's First Physical Modeling Synthesizer," produces entirely computer-generated sounds, without the use of oscillators or sampled waveforms. The CBX-D5 is a direct-to-disk recording system that connects to any host computer through a standard SCSI interface. Seating is limited, so R.S.V.P. to (213)845-1145.

MAY 7

AFI OPEN HOUSE & MEDIA CAREER DAY

Warner Communications Bldg., LA

The American Film Institute offers Advanced Technology Programs geared toward the information, training, and career needs of entertainment and new media professionals. The courses are designed to keep people up to date on new equipment, terminology, and the issues affecting the motion picture, television, computing, and related fields. The open house offers an opportunity to meet the faculty and staff, check out the facilities, and get advice and information about the resources available at AFI. The open house runs from 10 am to 3 pm. For more information call (213)856-7690.

MAY 8

COMPUTER SHOW

Buena Park

National Productions, who brought you the Los Angeles Computer Fair, presents the Computer Marketplace. Hundreds of exhibits with thousands of products of interest to the beginner and advanced computer user will be featured. Admission is free and parking is free. The Marketplace is from 10:00 am to 5:00 pm at the Sequoia Conference Center in Buena Park. For information, please call 1-800-800-5600.

"The Traveling Mall That Has It All"

Computer MARKETPLACE

COMPUTER TRADE SHOW
WHOLESALE PRICES
OPEN TO THE PUBLIC

10:00 a.m. to 5:00 p.m.

Pomona Shows 300 EXHIBITS

Hundreds of companies having price wars to compete for your business. You couldn't find this much inventory in a hundred computer stores nor at these prices. There is also a consignment table to sell your computer equipment.

SHOW DATES

May 7 Saturday	**SANTA BARBARA** - (Earl Warren Showgrounds) Highway 101 and Las Positas	Admission: $5.00
May 7 Saturday	**PAYALLUP WASHINGTON** - (Payallup Fairgrounds)	Admission: $5.00
May 8 Sunday	**BUENA PARK** - Sequoia Conference Center Take the Beach Blvd. Exit off the 91 Freeway, go one block North to 7530 Orangethorpe.	**ADMISSION FREE!**
May 14 & 15 Saturday & Sunday	**POMONA** - Fairplex (LA County Fairgrounds) Exit Highway 10 at Fairplex Drive. Go North to McKinley, turn right. Turn Left on White Avenue to Gate 14.	Admission: $7.00
June 4 & 5 Saturday & Sunday	**POMONA** - Fairplex (LA County Fairgrounds)	Admission: $7.00
June 11 Saturday	**RESEDA** - Sherman Entertainment Center From 101 Freeway, take Reseda off ramp, turn left (if traveling East) to Sherman Way, turn right, one block to Canby Street. 18430 Sherman Way.	**ADMISSION FREE!**
June 12 Sunday	**BUENA PARK** - Sequoia Conference Center	**ADMISSION FREE**
June 25 & 26 Saturday & Sunday	**POMONA** - Fairplex (LA County Fairgrounds)	Admission: $7.00
July 9 Saturday	**RESEDA** - Sherman Entertainment Center	**ADMISSION FREE**
July 10 Sunday	**BUENA PARK** - Sequoia Conference Center	**ADMISSION FREE!**
July 16 & 17 Saturday & Sunday	**POMONA** - Fairplex (LA County Fairgrounds)	Admission: $7.00
July 23 Saturday	**SANTA BARBARA** - (Earl Warren Showgrounds)	Admission: $5.00

National Productions, Inc.
(408) 778-5200 or 800-800-5600

Calendar Of Events continued

JUNE

June 2–3 PageMaker Conference. Seattle, WA. Thunder Lizard Productions. Call: (206)285-0305.

June 3–4 Computer Marketplace. Pomona Fairplex. National Productions. Call: 1-800-800-5600.

June 5 Computer Show And Sale. Scottish Rite Center, San Diego. MarketPro Shows. Call: (415)456-6730.

June 6–8 Digital World Convention. Los Angeles. Seybold Seminars. Call: 1-800-488-2882.

June 7 Interactive Media Festival Awards Show. Los Angeles. Interactive Media Festival. Call: (408)982-0400.

June 11 Computer Marketplace. Sherman Square Entertainment Center, Reseda. National Productions. Call: 1-800-800-5600.

June 12 Computer Marketplace. Sequoia Conference Center, Buena Park. National Productions. Call: 1-800-800-5600.

June 12 Computer Show And Sale. Community Center, Oxnard. MarketPro Shows. Call: (415)456-6730.

June 12 Computer Show And Sale. Fresno Fairgrounds, Fresno. MarketPro Shows. Call: (415)456-6730.

June 13–16 SunWorld Conference. San Francisco. Smith & Shows. Call: (508)820-8658.

June 17–18 MacFair LA '94, The Macintosh Trade Show For Southern California. Burbank Hilton Convention Center. Los Angeles Macintosh Group. Call: (818)574-8047.

June 18 Computer Show And Sale. Riverside Convention Center, Riverside. MarketPro Shows. Call: (415)456-6730.

June 19 Computer Show And Sale. Antelope Valley Fairgrounds, Lancaster. MarketPro Shows. Call: (415)456-6730.

June 23–25 PCC '94: The Personal Communications And Computing Show. Chicago, IL. PCC. Fax: (202)457-8898.

June 25–26 Computer Marketplace. Pomona Fairplex. National Productions. Call: 1-800-800-5600.

June 25–26 FLIGHT.Ware Xpo. Santa Monica. Santa Monica Museum of Flying. Call: (310)392-8822.

JULY

July 9 Computer Marketplace. Sherman Square Entertainment Center. Reseda. National Productions. Call: 1-800-800-5600.

July 10 Computer Marketplace. Sequoia Conference Center, Buena Park. National Productions. Call: 1-800-800-5600.

July 16–17 Computer Marketplace. Pomona Fairplex. National Productions. Call: 1-800-800-5600.

July 21–23 1994 International Symposium On Mathematics, Science Education, And Technology. San Diego. Association for the Advancement of Computing in Education. Call: (804)973-3987.

July 23 Computer Marketplace. Earl Warren Showgrounds, Santa Barbara. National Productions. Call: 1-800-800-5600.

July 23–24 International Computer Show And Sale. Riverside Convention Center (Raincross Square). R.G. Canning. Call: (213)587-5100, Event Ext. 4; (909)628-4236, Event Ext. 50.

July 24–29 Siggraph '94. Orlando, FL. Association for Computing Machinery. Call: (708)850-7843.

July 27–29 Object World Conference. San Francisco. Smith & Shows. Call: (508)820-8658.

AUGUST

August 1–5 Tools USA Conference. Santa Cruz. Smith & Shows. Call: 1-800-553-9939.

August 14–19 SCO Forum '94. Santa Cruz. Smith & Shows. Call: 1-800-553-9939.

Serving America's Most Endangered Children
National Headquarters
408-971-4VCA
P.O. Box 909 • Los Gatos, CA 95031-0909
1407 Parkmoor Avenue, Suite 200 • San Jose, CA 95126
HAVE YOU SEEN THIS CHILD?
If so, please call!
800-VANISHED
Sightings ONLY

HEATH, Ryan Michael
Date of Birth: 07-04-81
Date Missing: 09-12-92
Missing From: Sacramento, CA
Hazel Eyes & Brown Hair
Missing Type: Family Abduction by Mother & Stepfather

CLASSES, SEMINARS, AND WORKSHOPS

APRIL

April 16 Production Design For Feature Films Course. Los Angeles. The American Film Institute. Call: (213)856-7690.

April 17 Digital Stage Workshop. Los Angeles. The American Film Institute. Call: (213)856-7690.

April 18 High-End Output For Feature Films And Documentaries Workshop. Los Angeles. The American Film Institute. Call: (213)856-7690.

April 18–19 Cross Platform Design With The Apple Media Tool Kit Course. Los Angeles. The American Film Institute. Call: (213)856-7690.

April 18–22 Trusted System Design And Engineering Class. Los Angeles. UCLA Extension. (310)825-1047.

April 19 The Digital Highway Computer Media Salon. Los Angeles. The American Film Institute. Call: (213)856-7690.

April 20 Shifting Gears With Your Career Dinner Meeting And Panel Presentation. UCLA Faculty Center, Los Angeles. LA Chapter of the American Society for Information Science. Call: Carolyn Loeffler, (310)825-4019.

April 20–21 Advanced Animation With Electric Image Workshop. Los Angeles. The American Film Institute. Call: (213)856-7690.

April 22 Reinventing Hollywood Computer Media Salon. Los Angeles. The American Film Institute. Call: (213)856-7690.

April 23 Accessing The Resources Of The Internet Workshop. Universal CityWalk. UCLA Extension. (310)206-1638.

April 23 Better Investing Bit By Bit Seminar. Howard Johnson Plaza Hotel, Culver City. National Association of Investors Corporation, LA Council. Call: P.M. Bartlett, (310)395-7663.

April 23–24 Fractal Painter For Film And Video Workshop. Los Angeles. The American Film Institute. Call: (213)856-7690.

April 25–26 Basic MacroMedia Director Class. Los Angeles. The American Film Institute. Call: (213)856-7690.

April 27 Master Class: MacroMedia Director Scripting And Lingo. Los Angeles. The American Film Institute. Call: (213)856-7690.

April 27–29 Thermal Management Of Electronic And Multichip Modules Class. Los Angeles. UCLA Extension. (310)825-1047.

April 28 ScriptX Workshop. Los Angeles. The American Film Institute. Call: (213)856-7690.

April 30 Adobe Premiere Master Class. Los Angeles. The American Film Institute. Call: (213)856-7690.

MAY

May 7 Open House And Media Career Day.

Computer Max

(714) - 953 - 0233

COMPLETE MULTIMEDIA

SOUND BLASTER AND ADLIB COMPATIBLE
SOUND CARD W/SPEAKERS, MICROPHONE, AUDIO CABLE, CD-ROM INTERFACE
PANASONIC CD-ROM 320MS, DOUBLE SPEED

FREE CD SOFTWARE! *2 GAMES* ONLY $199

FREE CD SOFTWARE! OVER $500 DOLLARS WORTH OF SOFTWARE!! $225

MEDIA VISION FUSION CD 16

Computer CD Sound System Kit Contains:
PRO AUDIO SPECTRUM 16 BIT STEREO SOUND CARD, LABTEC SPEAKERS, PHILLIPS CD ROM DRIVE (350MS ACCESS 150 TRANSFER RATE), 5 CD TITLES (COMPTON'S MULTIMEDIA ENCYCLOPEDIA, CARMEN SAN DIEGO, CIVILIZATION, MANTIS, BATTLE CHESS)

ONLY $199

PRO AUDIO SPECTRUM 16 BIT STEREO SOUND CARD, LABTEC SPEAKERS, PHILLIPS CD ROM DRIVE (320MS ACCESS TIME) *OVER $700 OF CD ROM SOFTWARE* INCLUDES: (COMPTON'S INTERACTIVE ENCYCLOPEDIA, ARTHUR'S TEACHER TROUBLE, SPACE ADVENTURE, GREENS, B17 FLYING FORTRESS, RAIL ROAD TYCOON)

ONLY $299

386SX/40MHz BAREBONES

- Mini Tower Case
- 200W Power Supply
- Digital Display
- TEAC 1.2 or 1.44MB Floppy Drive
- Hard and Floppy Controller
- 101 Keyboard
- 2 Serial, 1 Parallel, 1 Game Port

$175

SYSTEMS

386DX/40MHz BAREBONES

- Mini Tower Case
- 200W Power Supply
- Digital Display
- TEAC 1.2 or 1.44MB Floppy Drive
- Hard and Floppy Controller
- 101 Keyboard
- 2 Serial, 1 Parallel, 1 Game Port

$219

SOUND CARDS

BABY BOOMER
Adlib Sound Card • Includes Speakers *FREE* Joystick $29

AUDIO PLUS
Audio Plus Sound Blaster Compatible Sound Card Audio Plus Sound Card $39
• Includes Speakers, Microphone, Games & Joystick $59

GALLANT SC3000
8 Bit Sound Card
• Includes Speakers, Microphone & Games $55

GALLANT SC4000
8 Bit Sound Card
• Includes Interface Card, Speakers, Microphone & $500 Worth Of Software $69

GALLANT SC5000
8 Bit Sound Blaster Pro Compatible Sound Card
• Includes Interface Card, Speakers, Microphone & $500 Worth of Software $99

GALLANT SC6000
16 Bit Sound Blaster Pro Compatible Sound Card
• Includes Interface Card, Speakers, Microphone & **$500 WORTH OF SOFTWARE** $125

Topek 16 bit Sound Card w/Microphone 99
Computer Speaker System (Pair) 5
Computer Speaker System (Pair) Volume Control 9
Amplified Speakers (Pair) 18
Amplified Speakers 80 Watt (Pair) 59
Microphone 5
Joystick 10
Game Pad 10

CD TITLES $9

Dinosaur Adventure	$19	Classical Painting	9
Compton's Multimedia Encyclopedia	29	49er Window Games	9
Compton's Interactive Encyclopedia	49	All You Can Play	9
Mantis	14	Windows 50 Games	9
Gun Ship 2000	14	Business Library	9
F15 Strike Eagle III	14	Travel To Space	9
		Sound Library II	9
		Image Library II	9

MANY TO CHOOSE FROM

14.4 SEND/RECEIVE FAX MODEM V.32BIS, V.42BIS

• 14,400bps • DATA/FAX SPEEDS • SUPPORTS COM 1-4 • SOFTWARE INCLUDED • 5 YEAR WARRANTY •

MODEM INSTALLATION $10!

INTERNAL		EXTERNAL	
Calcom	$89	Calcom	$115
Zoltrix	99	Zoltrix	129
Supra	135	Zoltrix Pocket	179
US Robotics	125	Supra	149
Practical Peripherals	179	Supra Mac	159
		US Robotics	145

FAX MODEM

96/48/24 Fax Modem Windows 29
96/96/24 Fax Modem Dos or Windows 39
96/96/24 Fax Modem V.42bis 59
9600 Internal Modem V.42bis 89
9600 Ext. Modem V.42bis 115
96/96/24 External Fax Modem MNP5 59
96/96/24 Pocket Fax Modem 79

96/96/24 FAX MODEM W/VOICE MAIL $69

SUPER VALUES

CONNER 250MB TAPE BACK UP $139 (FREE TAPE!)

MONITORS
14" Monochrome $75
14" VGA Monitor, .39 189
14" VGA Monitor, .28 Full Screen 215
14" VGA Monitor, .28 Non-Interlaced Full Screen 235

VGA CARDS
256K VGA $25
512K VGA 35
1 Meg VGA 55
1 Meg VGA Vesa Local Bus 75

CONTROLLERS CARDS
I/O Card $10
Super IDE Controller 2 Serial/ 1 Parallel/1 Game Port 13
VLB I/O 25
16550 I/O Card 29
Monochrome Graphic Card 13

MOTHERBOARDS
386SX/40MHz $59
386DX/40MHz, 128K Cache 95
486SX/25MHz, 128K Cache 179
486DLC-40MHz 128K Cache 159
IBM 486SLC-66MHz 290

KEYBOARDS
Soft Touch $15
Click 19
Chicony Click 29
Focus Click 32

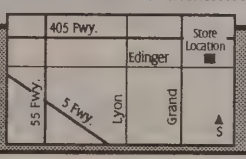
CASES
Deluxe Mini Tower, 200W Power Supply LED $34.99
Desktop Case, 200W Power Supply 44.99
Full Tower, 250W Power Supply 69
Medium Tower, 230W Power Supply 57

FLOPPY
1.44 NEC $37
1.2 NEC 42
1.44 TEAC 39
1.2 TEAC 45

MISCELLANEOUS
Focus Serial Mouse $5.99
Mouse Pad 1.50
Trackball 18.99
Glass Monitor Screen 9.99
Computer Cover 4.50
Printer Cable 2.99
Modem Cable R5232 ..... 3.99
Keyboard Drawer (Under Desk) 11.50
Keyboard Drawer (Desktop) 20
Copy Holder 5
Printer Stand 3.99
Disk File Case 3.99
Monitor Arm 12
Monitor Extension Arm 29.99

1322 E. EDINGER
SANTA ANA, CA 92705

WE ARE LOCATED DIRECTLY BEHIND GUADALAJARA RESTAURANT. We are not visible from the street.



PRICES SUBJECT TO CHANGE W/OUT NOTICE

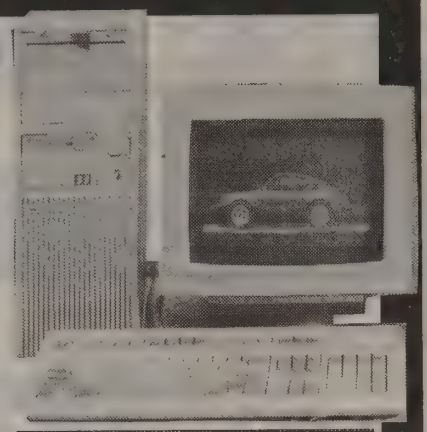
UPGRADE YOUR COMPUTER

386 Motherboard.....$99
486-33 Motherboard..$199
486-66 SLC.....$399

CASE Mini Tower
R/200 Watt.....$49

HARD DISK
340 MB.....$269
540 MB.....$476

MEMORY
1 MB.....$47
4 MB.....$169



MAC REPAIR DEPOT

Fix Your Mac and Save 35%-50%
FREE in shop estimates • On-site service

Logic Board from.....$199
Power Supply from.....$120
Monitor from.....$89
Monitor 17" & up.....$275
Floppy Drive from.....$185
PowerBook from.....$275

SYSTEMS

BIG WORK LOAD 486 SLC-66MHz, 8MB RAM, 2 FLOPPY, 540 MB • 14" VGA MONITOR **$1589**

BIG SERVER SYSTEM 486 DX-66MHz, 4MB RAM • 2 FLOPPY, 245 MB • 14" VGA MONITOR **$1289**

MULTI-MEDIA SYSTEM 486DX-33MHz, 4MB RAM • 1 2/1 44 FLOPPY, CD-ROM • SOUND CARD • SPEAKER CD ROM DISK **$1235**

GOOD RANGE COMPUTER 386 DX-40MHz, 4MB RAM • 2 FLOPPY, VGA MONITOR WITH HARD DISK DRIVE **$899**

SERVICE
Monitor.....from $59
Laser Repair.....$99

SUPPLIES/ACCESSORIES
Carrying Case.....$49
Toner HP II/III.....$79/$89
Memory 1MB.....$42
Hard Disk.....$199
Network Card.....$79
HP DeskJet Ink.....$19
Mouse.....$8
Keyboard.....$19
Paper, Ribbon.....IN STOCK
Tape Cartridge.....$12.95
Syquest Cart.....$49

MONITOR
14" SVGA .39.....$189
14" SVGA .28.....$220
15" SVGA .28.....$359
SPECIAL IBM VGA ONLY $139 (refur.)

MEMORY
BEST DEAL
For All Laptops & Notebooks
Toshiba • NEC • Compaq • IBM • AST and more!
Call for Best Price!

NOTEBOOK CENTER
Toshiba 4400SX.....Only $1199
TI SYSTEM ALL MODELS

SERVICE & SUPPORT CENTER

DESK TOP LASER PRINTER
All Supply Toner, Memory For Every Printer

Apple Laser 360.....$1389
DeskJet.....$255
DeskJetC.....$375
HP 4 Laser.....$1297
HP 4L.....$610
HP 4M.....$1799
HP for MAC.....ALL IN
QMS Laser.....$1199
Ti MicroLaser.....$899
QMS Laser.....$BEST
OKI 400E.....$487
Epson 500.....$649
Panasonic Laser.....$575
Mac Laser.....IN STOCK
Canon 200.....$299

LEA COMPUTERS, INC.
"YOUR CORPORATE SERVICE CENTER"
11610 West Olympic Blvd. • Los Angeles

310•478•0047

All prices are cash prices and are subject to change without notice

Keep your eyes open for the exciting new look of **MICROTIMES!**

In our 10th Anniversary Year

We know you're going to love it.

RESOURCES

Calendar Of Events continued

Los Angeles. American Film Institute. (213)856-7690.

May 9–11 Nonlinear Dynamics Information Processing In Chaos, Fuzzy Logic, And Neural Networks Class. Los Angeles. UCLA Extension. (310)825-1047.

May 10 Adobe Premiere Clinic. Irvine. Graphix Zone. Call: (714)833-3838.

May 10 Apple Media Tool Clinic. Irvine. Graphix Zone. Call: (714)833-3838.

May 12 Multimedia Hits The Road Free Seminar. Irvine. Graphix Zone. Call: (714)833-3838.

May 17–20 Microwave/Millimeter-Wave Monolithic Integrated Circuits Class. Los Angeles. UCLA Extension. (310)825-1047.

May 18 Jazzed On Color Publishing Free Seminar. Irvine. Graphix Zone. Call: (714)833-3838.

May 19 Adobe Illustrator Clinic. Irvine. Graphix Zone. Call: (714)833-3838.

May 19 Adobe Photoshop Clinic. Irvine. Graphix Zone. Call: (714)833-3838.

May 20 Fast Forward To Digital Video Free Seminar. La Jolla. Graphix Zone. Call: (714)833-3838.

May 20 Jazzed On Color Publishing Free Seminar. La Jolla. Graphix Zone. Call: (714)833-3838.

May 23–24 Ed Yourdon On Object-Oriented Analysis And Design Seminar. Los Angeles. DCI. Call: (508)470-3880.

May 23–27 Integrated-Services Telecommunications Networking: High-Speed Local, Metropolitan, And Wide-Area Networks Course. Los Angeles. UCLA Extension. Call: (310)825-1047.

May 24 Fast Forward To Digital Media Free Seminar. Irvine. Graphix Zone. Call: (714)833-3838.

May 31 Multimedia Solutions For Business Free Seminar. Irvine. Graphix Zone. Call: (714)833-3838.

JUNE

June 14–17 CD-ROM Development Workshop: From Multimedia Publishing To Data Archival Class. Los Angeles. UCLA Extension. (310)825-3344.

AUGUST

August 15–18 An Introduction To C++: Object-Oriented Programming And Design Class. Los Angeles. UCLA Extension. (310)825-1047.

August 22–24 Software Safety: Principles And Practice Class. Los Angeles. UCLA Extension. (310)825-1047.

The CALIFORNIA COMPUTER The CALIFORNIA

New 3 Year Warranty for all NANAO

NANAO Flexscan F780i-W

- *21"*, Full flat screen CRT Invar Shadow Mask
- NEW power save feature
- Ultra High Resolution
- 1600 x 1200 flicker-free 77Hz refresh
- .26 mm Dot Pitch
- Ergonomic standard MPR-II
- VESA DPMS

$3795

NANAO Flexscan F760i-W

$100 Rebate

- *21"*, Full flat screen CRT Invar Shadow Mask
- NEW power save feature
- Microprecessor pic & color control
- 1280 x 1024 flicker-free 72Hz refresh
- Ergonomic standard MPR-II
- 30-78kHz H. scan/ 55-90Hz V. Scan
- 120 MHz Video bandwidth

$1975*

NANAO Trinitron T660i

$100 Rebate

- Trinitron *20"* screen 0.31mm
- Up to 1664 x 1200 resolution
- 1280 x 1024 flicker-free 70Hz refresh
- Microprocessor control for pic. & color
- Low magnetic & electricfield radiation

$2250*

NANAO Flexscan F560i-W

$30 Rebate

- *17"*, Full flat screen Invar Shadow Mask
- Ultra high resolution, .26 Dot Pitch
- 65kHz H.scan frequency with 76Hz high refresh rate for flicker-free 1280 dots x 1024 lines resolution
- Advanced Image Control for automatic picture adjustment and color control
- Low magnetic field and electric field radiation

$1395*

NANAO Flexscan F550i

$100 Rebate

- *17"*, Full flat screen
- Up to 1280 x 1024
- 1024 x 768 at flicker-free 75Hz refresh
- Microprocessor control for pic. & color
- Low magnetic & electricfield radiation

$ 895*

NANAO Trinitron T560i

$50 Rebate

- Trinitron *17"* screen 0.26mm
- Up to 1664 x 1200 resolution
- 1280 x 1024 flicker-free 75Hz refresh
- Microprocessor control for pic. & color
- Low magnetic & electricfield radiation

$1599*

NANAO Flexscan F550i-W

$30 Rebate

- *17"*, Full flat screen Invar Shadow Mask
- Ultra high resolution and wide usage with auto-adjusting H. scan frequencies from 30 kHz to 65kHz
- 65kHz H.scan frequency with 74Hz high refresh rate for flicker-free 1024 dots x 768 lines resolution
- Advanced Image Control for automatic picture adjustment and color control
- Low magnetic field and electric field radiation

$1065*

NANAO Flexscan F340i-W

- *15"*, Full flat screen Invar Shadow Mask
- New power save feature
- 1024 x 768 at flicker-free 75Hz refresh
- Microprocessor control for pic. & color
- Low magnetic & electricfield radiation

Call for Best Price!

NANAO

2nd Inventory On All Model

Call For Price!

* After Rebate Price.

AWARDS

PC MAGAZINE EDITORS' CHOICE
WINDOWS MAGAZINE 1993
1991 BYTE AWARD OF EXCELLENCE
HIGHLY RECOMMENDED C
PC Computing MVP 92 WINNER
Energy EPA POLLUTION PREVENTER
BUYER ASSURANCE SEAL INFO WORLD RECOMMENDED PRODUCT
THE PC/COMPUTING 200 BEST PC PRODUCTS 1992
BEST OF BYTE COMDEX/FALL 92
RECOMMENDED PRODUCT INFO WORLD
1992 W 100 WINDOWS MAGAZINE ANNUAL WIN AWARD
WINNER WINDOWS USER BEST AWARD 1992
MACUSER EDITORS' CHOICE AWARD 1992 FINALIST
1993 ANNUAL WINDOWS 100 W MAGAZINE WIN AWARD

NANAO Authorized Dealer

The CALIFORNIA COMPUTER

LABOR AND PARTS WARRANTY 3 YEAR NANAO

VISA MasterCard Financing Available AMERICAN EXPRESS CARD

950 E. Colorado Blvd. Suite #102,
Pasadena, CA 91106
Hours: Mon-Fri, 9:30-6:00PM ; Sat, 10AM-5PM

818-568-1122
Fax: 818-568-1515

All brand names are trademarks of their respective companies. Prices quoted base on 3% cash discount, Prices and specifications are subject to change without notice. TCC is not responsible for typographical or photographical errors. Financing are subject to credit approval.

Ask About Our 90 Day Same as Cash Financing Program

Ask About Our 90 Day Same as Cas

The CALIFORNIA COMPUTER The CALIFORN

World-Class Portable Power

Canon Notejet 486 Bubble Jet Printer Built-In Two-In-One!

- 486SLC-25 MHz
- 4MB Up to 12MB
- 1.44MB Floppy Drive
- 130MB Hard Disk (190MB Option)
- Bubble Jet Printer Built-In
- Automatic Sheet Feeder Built-In
- PCMCIA - 2 Type II
- 10" LCD VGA Screen
- Canon 2-Button Hand Hold Trackball
- MS DOS 6.0, WINDOWS 3.1
- 4 Hour Battery
- 7.7 Lbs. w/Bubble Jet Printer Inside

	135MB	180MB	200MB
MONO	$2335	$2525	
DUAL SCAN COLOR	$2725		$3045

Canon Dual Scan Color SL Enhanced

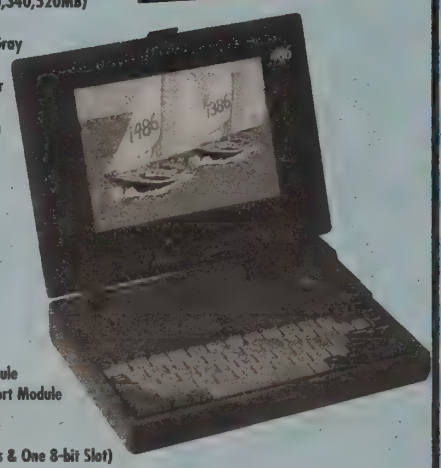
- Intel 486SX-25
- 4Mb RAM
- 120Mb Hard Disk
- 3.5" 1.44Mb Floppy Drive
- 9.5" Mono Passive LCD 640 x 480, 64 Gray
  9.5" Dual Scan Color Passive LCD 640 x 480
- 1 Serial, Parallel, VGA, Mouse,
  Fax/Modem 9600/2400 (Send/Receive) port
- Build-in Trackball mouse in center
- Weight: 6.3lbs W/battery
- MS-DOS 6.0, Windows 3.1, MS-Works,
  Micro Fax Preload

	MONO	COLOR
488SX-25 4MB,120MB	$1450	$2100

DUAL-400 Removable Hard Drive

Replaceable Module Pack

- 486 series CPU (Easy to Upgrade)
- 4MB RAM, Easy to Expand up to 20MB
- Removable 170MB Hard Disk (260,340,520MB)
- 3.5" 1.44MB Floppy Drive
- 9.5" Mono 640 x 480 Backlit 64 Gray
  (Upgradable to Color LCD)
- 9.5" Da-Scan 640 x 480, 256 color
- 9.5" Active 640 x 480, 512 color
- Simultaneous CRT & LCD Operation
- Ports for 1S, 1P,
  Ext VGA Monitor/Keyboard
- Ports for AT expansion box
- 83-Key Keyboard
- Carrying Case & AC/Adapter
- Weight 6 lbs. with Battery
- 11.7"W x 8.4"D x 1.95"H



OPTIONAL MODULE PACK AND OTHER OPTIONS:

- Trackball (Standard) Module
- Fax/Modem (9600/2400bps) Module
- Lan Adapter Module / 2nd Serial Port Module
- PCMCIA* Type II Interface Module
- Scanner Module / SCSI Module
- AT Expansion Box (Four 16-bit Slots & One 8-bit Slot)

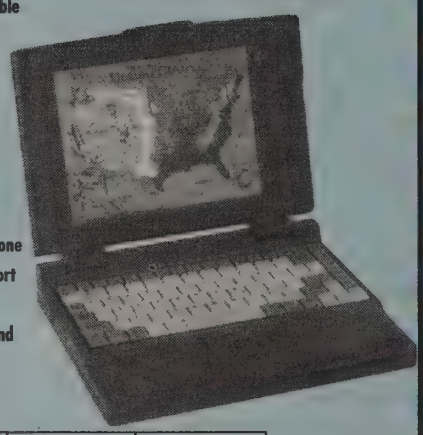
	MONO	DUAL SCAN COLOR	ACTIVE COLOR
486SX-25, 4MB/170MB	$1340	$1820	$2840
486DX-33, 4MB/170MB	$1520	$1995	$2920
486DX2-66, 4MB/170MB	$1725	$2195	$3175

FR-300 Multimedia Notebook

LOCAL-BUS

PCMCIA

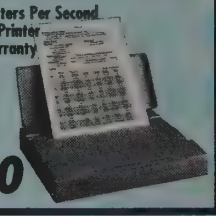
- 32Bit VL-Bus
- 9.5" VGA Display (CCFT,
  Dual Scan and Active)
- Intel 486SL, SX and DX Upgradable
- 4MB RAM Expandable to 32 MB
- Phoenix BIOS
- 3.5 Removable Floppy Drive
  Exchangeable to second battery
- Built-in speaker, microphone and
  25mm Super Trackball
- 1 Parallel, 1 Serial, 1 Line-in,
  1 Line-out audio Jack, 1 Microphone
  Jack, external VGA, Keyboard Port
- PCMCIA Slot Type III
- 6 lbs with Battery Optional second
  battery, Docking Station,
  Sound Card and Pen Map



SL ENHANCED	MONO	DUAL SCAN COLOR
486SX-25 4MB/250MB	$1635	$2245
486DX-33 4MB/250MB	$1835	$2445
486DX2-66 4MB/250MB	$2085	$2695

Canon Bubble Jet BJ-10sx

- 110 Characters Per Second
- Laser-Like Printer
- 2-Year Warranty



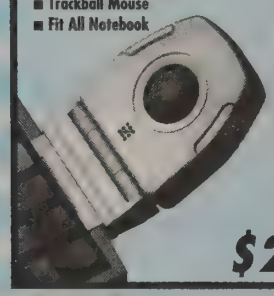
$240

Canon BJ-200e

- 256 Gray Scale
- 4 Page Per Min., 360 DPI Re
- 100 Sheets or 10 Envelopes
- EPSON & IBM Emulation
- 49KB Buffer, Weight 6.6 lbs.
- 2 Year Factory Warranty

SUPERTRAK

- Trackball Mouse
- Fit All Notebook



$29

TOSHIBA Universal Notebook Carrying Case

$39

Canon IX-4015 Color Scanner

New

- 24 bit Color
- 400 DPI x 1200 DPI Hi-Resolution
- 20 Second Color Scanning Speed
  (10 Second For Mono)
- One Year Warranty

$995

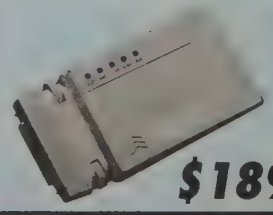
Canon LPB-860 Laser Printer

Same as HP 4

- 600 DPI
- 45 Scalable Fonts
- 2Mb RAM up to 34Mb
- 2 Year Warranty

SmartLink

Pocket Size Fax/Modem
14,400 bps



$189

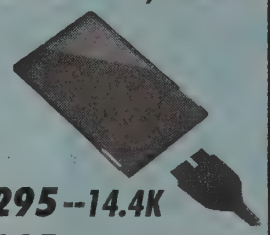
19.2K Ext. Fax/Modem

V.32, V.32bis
V.42, V.42bis
w/NMP5

$215 Ext.

Int. $189

PCMCIA Fax/Modem



$295 --14.4K
$165 --96/2400

Upgrading your PC?

486 Mother Board w/CPU

486DX-40..... $315
486DX2-50..... $305
486DX2-66..... $458

Ask About Our 90 Day Same as Cash Financing Program Ask About Our 90 Day Same

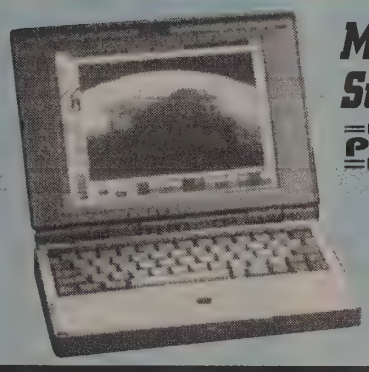
IA COMPUTER *The* CALIFORNIA COMPUTER

From California Computer

LABOR AND PARTS WARRANTY 1 YEAR TCC

MiTAC

- Intel 486 SX-25 SL Enhanced
- 4Mb RAM, 8K Int cache
- Ext. 1.44Mb Floppy Drive
- 120Mb Hard Disk Removable
- 2 PCMCIA Slot
- 9.5" Mono LCD Passive
- Build-in Trackball mouse
- 1 Serial , Parallel, Mouse
- 8 Bit Sound Card Build-in
- Less than 4 lb
- Small: 1.5" x 10.5" x 7.8"
- MS-DOS6.0, Windows 3.1 Preload



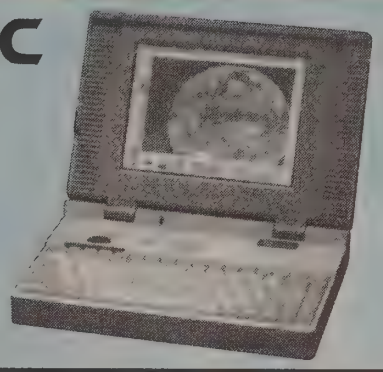
Multimedia Sub Note

PCMCIA

$1375
After $100 Rebate

MiTAC

- Intel 486SX-33
- 4Mb RAM, Up to 20 Mb
- 1.44Mb Floppy Drive
- 130 Mb Hard Disk
- 8.5" Passive LCD Display
- Build-in Track Ball Mouse
- 1 Serial, 1 Parallel Mouse
- Lightweight: 6.5lbs
- MS-DOS6.0, Windows 3.1



Color

$1775

Canon

The Bigger, Better Budget Minded BJ-230

- Handles A Variety Of Paper Sizes Up To 11" x 17"
- Fast Letter-Wide Printing
- 2-Year Linited Warranty

$389

NP-602

486SLC-33

- 4Mb RAM, 64K cache
- 1.44Mb Floppy Drive
- 120Mb HD Removable
- 10" Mono LCD Passive 640 x 480, 64 gray
- Build-in Trackball Mouse
- 1 Serial, Parallel, Mouse, VGA(800 x 600), Keyboard, Port
- 83-key keyboard
- Lightweight: 5.5lbs
- Demensions: 8.7" x 11.1" x 1.65"

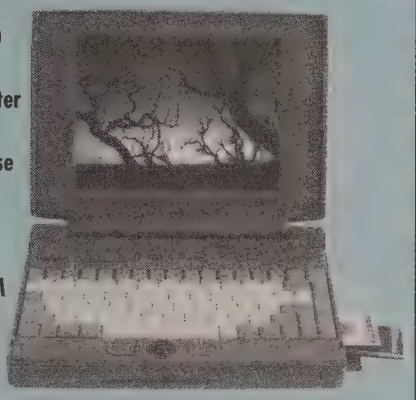
$1295

PRO-5000

LOCAL-BUS

PCMCIA

- Intel 486SX-25 upgradable 486DX2-66
- 4Mb RAM up to 32Mb
- 3.5" 1.44Mb Floppy Drive
- 200Mb Hard Disk (Removable) up to 340Mb *
- Build-in Trackball mouse in center
- PCMCIA Type III Slot
- 2 Serial, 1 Parallel, VGA, Mouse Keyboard, Docking Port
- 9.5" Mono/Du-Scan/Active 640 x 480 , 64 Gray Ext. 1024 x 768 W/1Mb RAM
- Weight: 5.8lb W/battery

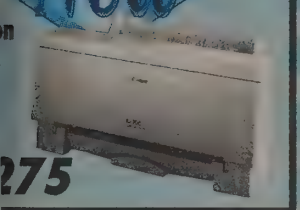


Upgrade to 520MB $450
Upgrade to 340MB $150

	MONO	DUAL SCAN	ACTIVE COLOR
486SX-25, 4MB,250MB	$1660	$2195	$3225
486DX-33, 4MB,250MB	$1856	$2395	$3415
486DX2-66, 4MB,250MB	$2045	$2585	$3595

LASER QUALITY BUBBLE JET PRIC

New



275

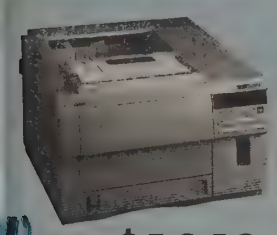
Canon

BJC-600 PERSONAL COLOR PRINTER

New

- Prints 360 dpi on Plain Paper for Brilliant Color Quality
- Doubles as a Laser Quality, Black & White Printer
- Individual Ink Cartridges
- 100 Sheet Feeder for Letter, Legal, Envelopes
- 20 Scalable True Type Font
- 2 Year Warranty

$579



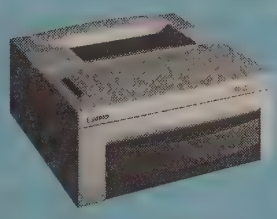
$1249
After $50 Rebate

Canon

LBP-430 LASER PRINTER

Same as HP 4L

- Energy Saving
- 22 Fonts (8 Scalable)
- 1Mb up to 5Mb
- 2 Year Warranty



$579

Canon Authorized Dealer

TATUNG Authorized Dealer

GE Protect Your PC Investment

NANAO Authorized Dealer

MITAC Optiquest

We Offer... 4 Year On-Site Service Contract GE Consumer Service

The CALIFORNIA COMPUTER

All systems come with 245 MB hard drive, 4 MB RAM, TEAC 1.2 & 1.44 MB folppy drives, 14" SVGA monitor 0.28mm Non-Interlaced, VESA Local-Bus SVGA card, Local-Bus IDE I/O with 2 serial, 1 parallel ports, Mini-Tower case, 101-key keyboard, Serial mouse.

486DX2 VLB66	486DX2 VLB50	486DX VLB40	486DX ISA33
$1450	$1245	$1225	$975

950 E. Colorado Blvd. Suite #102, Pasadena, CA 91106

Hours: Mon-Fri, 9:30-6:00PM ; Sat, 10AM-5PM

818-568-1122

Fax: 818-568-1515

MasterCard VISA AMERICAN EXPRESS Financing Available

All brand names are trademarks of their respective companies. Prices quoted base on 3% cash discount, Prices and specifications are subject to change without notice. TCC is not responsible for typographical or photographical errors. Financing are subject to credit approval.

as Cash Financing Program Ask About Our 90 Day Same as Cash Financing Program

USER GROUP NETWORK

BULLETIN BOARDS

MULTI-ZONE

Annex! BBS. (213)971-4686, (310)388-3818, (818)786-5600. 8-N-1, 1200/2400/9600/14,400. 42 lines. Games, files, chat, TradeWars 2002, Internet, parties, and more! Friendly! Sysop: Gregory Gooden. [Exp. #124.]

AOS. (213)566-6727, (310)838-8203, (714)750-8423, (805)522-4950, (818)969-8BBS. 8-N-1, 2400. 34-line family board. Chat, forums, interactive games, tutors, Inter-Link, Major Net, friends and fun. Free trial. Sysop: Nancy Teppler. [Exp. #124.]

Asia America BBS. (310)326-1683; (714)772-5301; (818)284-4519, 989-2041. 8-N-1, 2400/9600/14,400. Focus on Pacific Rim economy, cultural and business exchanges. Free. Sysop: Bob F. Howard. [Exp. #124.]

Atlantis, The Lost BBS. (714)256-1360, 828-6459; (818)859-6300, 579-4143, 798-4007. 2400–16,800. Ripterm EGA, multiline chat, games, travel, scuba, forums, and fun. Sysop: Ron DeRuyter. [Exp. #122.]

CPI BBS. (213)888-0775, (714)990-3341, (818)858-5730. 8-N-1, 24 hrs., 1200/2400/9600/14,400. Multiline, nationwide mail, message conferences (Fido), matchmaker, chat, and more. Free trial. [Exp. #123.]

Crystal Palace. (310)472-2598, (818)765-2171. 8-N-1, 24 hrs., 300–14,400. 15+GB of GIFs, stories, and shareware on CD-ROM, netmail, active msg. database, matchmaker, games, computer store. Sysop: Daniel Mathis. [Exp. #124.]

EDEN—The Electronic Garden. (310)421-2420; (714)548-1900, 530-6335. 24 hrs., 14,400. 16 lines. Adults only "playground," featuring chat, games, email, forums, files, and fun. Sysop: Daniel Vesely. [Exp. #124.]

KBBS. (213)725-3047; (310)558-0145; (805)520-7323; (818)886-0872. 24 hrs. 68 lines, 60,000+ files, national chat all evening. Free trial. [Exp. #123.]

Miller's Party Board. (213)727-0251, 569-9191; (310)815-0117, 214-7964, 539-3823, 929-4304, 430-4422; (714)964-0311; (818)879-1333, 700-0627, 881-0442, 240-8296, 769-2302, 577-5880, 961-2458. 14,400. 32 lines, Gallacticomm Major BBS software. Chat, live and online games, and more. 14 day free trial. Sysop: Jack Stern. [Exp. #122.]

Prism. (310)799-0380; (714)454-9242, 638-7240, 642-6256. 8-N-1, 24 hrs., 300–16,800. 32 lines, 4.5GB. International email, online games, adult chat, matchmaking, and social events. Instant access. [Exp. #124.]

US Pompeii. (213)878-2801, 262-8110; (310)324-5782, 645-6969, 832-3526; (805)583-1180; (818)768-6745. 8-N-1, 24 hrs., 2400. Local/international email, forums, chatlinks. Matchmaker, libraries, databases. One month free. Sysop: Zippy Manus. [Exp. #122.]

213

The Career Network BBS. (213)629-1472, 629-5119. 8-N-1, 5:30 pm–1:30 am, 1200/2400. Hundreds of JOBS! JOBS! JOBS! throughout the US; your resume can reach 200+ employers monthly. Sysop: Steven McCormick. [Exp. #124.]

La Miranda's The Modems Delight BBS. (213)944-1221. 24 hrs., Up to 19,200. Multi-interest files, doors, games, and fun. Running PC board 15.A/3 email. Sysop: Ronald Dishon. [Exp. #122.]

310

The Bizopps Connection. (310)677-7034. 8-N-1, 24 hrs., up to 14,400. Provides listings of business and franchise opportunities; place your ads; and more. Sysop: Lawrence C. Toliver. [Exp. #124.]

The Cow God BBS. (310)559-2156. 24 hrs., 38,400. Almost a gig of shareware. Multiline chat, online games, 1500 messages/day. Sysop: Broc TenHouten. [Exp. #124.]

Dejavu BBS. (310)218-3561, 218-3562. 8-N-1, 24 hrs., 2400/14,400. Matchmaker, games, adult files, email, chat, Vietnamese/Chinese/Asian guys and gals welcome. Free. [Exp. #124.]

Manhattan Online. (310)374-9444. 14,400. Windows, DOS, Mac, OS/2 files, Fidonet, Internet mail, PC catalog. 2 lines, 1 hour access. Free. Sysop: Paul Swanno. [Exp. #122.]

the original off-off broadway BBS. (310)453-7038. 8-N-1, 24 hrs., 300/1200/2400/9600. Nonsubscription, text files/messages only. Using MajorBBS software and CompuCom Speedmodem. Sysop: James Gossage. [Exp. #123.]

2nd Amendment BBS. (310)902-0252. 24 hrs., 300/1200/2400/9600/14,400. Running TriBBS, 15+ message bases, MS-DOS files. Free. Sysop: Michael McBroom. [Exp. #122.]

The Spider's Web BBS. (310)416-9901. Online games, message areas include recovery and 12-step. Ecology, spirituality, science, and more. Free first call. [Exp. #123.]

708

Mortgage Market Online. (708)834-1450. Mortage finance and real estate. 12 lines running TBBS. Sysop: Daniel Eaton. [Exp. #122.]

714

Aussie BBS. (714)670-6500. 8-N-1, Ten lines, chat, games, highest quality adult GIFs, 18,000 files, and more. Sysop: Mike Szabados. [Exp. #122.]

The CyberNet BBS. (714)378-0085, 378-0741. 24 hrs., 2400–57,600. Downloads, FidoNet, Aminet, games, message bases, 15,000 Internet files online. Free. [Exp. #122.]

Electric Acid. (714)541-6217. 8-N-1, 24 hrs., 2400/9600/14,400. 3.6+GB, 50+ online games, hundreds of game cheats, hardware discounts, and more. Sysops: Blackjack & Nemesis. [Exp. #124.]

Free Money Manager BBS. (714)642-7627. 8-N-1, 1200/2400. Free money manager files, online support. Free. [Exp. #122.]

BBS Spotlight

By John Wolcott

BBS Sanctuary

Choosing among the many bulletin boards in Southern California can be a difficult task. Sorting out which service best fits your needs may take some time and online exploration. Everyone has heard of the big online services such as America Online, GEnie, CompuServe, and Prodigy. The next step down from "the big boys" are the full-service subscription BBSes. The notch below that is home to the "freebies," offering many basic amenities but stopping short of major hardware expense.

This month's BBS Spotlight focuses on a BBS that lies somewhere between the "land of the freebies" and full-featured subscription. The Nocturnal Sanctuary is located in La Puente, and has operated for just over a year and a half. It does offer full access to its features to all callers and accepts subscriptions for more online time than thirty minutes per day. The enhanced time allowed on the BBS can help you through the times when you just haven't had enough modem fun for one day, or you just discovered a file you just have to download, right now, and your time online would normally be just about expired.

Subscription donations allow for system upgrades and basic maintenance. You may arrange for subscription payment through the mail or by calling a 900 number. Complete donation information is available from the main menu after you're online.

With two incoming phone lines, TNS (The Nocturnal Sanctuary) can take some persistence to access at peak calling times. The lines are supported by Practical Peripherals 14.4 modems offering high baud rates. Other system hardware includes three networked IBM-compatible computers: two 486/33 and one 386/40. The actual BBS presentation is brought to you on modified WWIV v4.23 software with ANSI graphics. This combination brings a professional appearance to this growing BBS.

Sysop Patrick McClean, alias The Keeper, enjoys providing a BBS with full access to all who ask. He comments, "Running a BBS was a natural progression for me. I was just an ordinary BBS user. Then a friend gave me a BBS demo disk. It really seemed like a neat thing to do, to offer BBS use to others."

All email to the Sysop is answered, and help for new BBS users is available for download in files, or from Patrick if he's around.

The Nocturnal Sanctuary is really a step up from the low-end BBSes. It offers networked email with many discussion conferences, extensive file transfer areas, an unbelievable collection of online games, chatting between the nodes, and an informational area that is really worth a look. The email section can link you to topical conferences with a large number of nationwide network users to discuss everything imaginable. The networks accessible include WWIVnet, WWIVLink, TerraNet, ROCKnet, SOLARnet, USAnet, USLink, IceNet, FILEnet, and GameLink.

From the Main Menu, you'll be able to choose a "Sub-conference" to view and post messages with mail automatically forwarded to the appropriate networks. Using conferences in the networks is a great way to exchange information with other computer users across the country.

FILEnet is a powerful tool in the email world. FILEnet will allow you to view files available on other BBSes across the country. You may then request that files be sent to your local BBS. For example, if you find a program on a BBS in Chicago that you'd really like to have, send mail to that BBS requesting it. It will automatically be uploaded to your BBS for your download pleasure.

The file conference areas boast over fifteen thousand files of DOS and Windows format "freeware" and "shareware" files. File libraries include topical choices of games, utilities, virus scanning, Windows/DV/OS2, graphics, and sound files to name a few. An adult-oriented file library is available to those who have provided the sysop with proof of age over 18.

So, what's the difference between "freeware" and "shareware"? BBSes are prohibited by federal copyright laws from offering commercial software. This leaves "freeware" and "share-

Continued

She turned on her modem and logged in to KBBS.
First, she found a new boyfriend.
Then she found a job.
Now she's found...

The Internet

And Other Exciting KBBS Bulletin Board Features!

"I had to keep repeating to myself, 'IT'S ONLY A BBS! IT'S ONLY A BBS!'"
- C. Prompt

"I'm not spending another DIME on those per-hour per-message big national systems - this place has it ALL!"
- I. Quitprodogy

"I've been playing this live interactive Trivia game 10 hours every day -- I CAN'T STOP!"
- Laurie H.

"Wow -- lots of cute women on here!"
- Eric T.

"Wow -- lots of cute women on here!"
- Christine P.

"I found Trade Wars 2002 on KBBS, now have no life."
- (Anonymous)

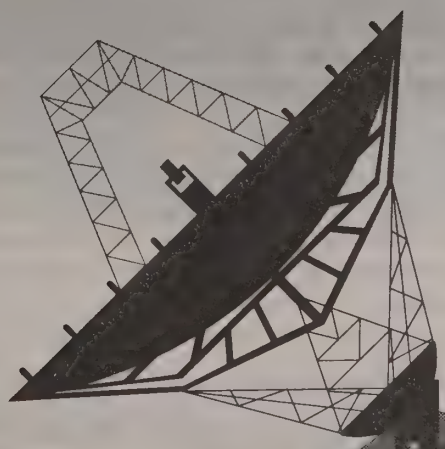
"Live Nationwide Chat for less than 1 a day?? INCREDIBLE!!!"
- A. Smartshopper

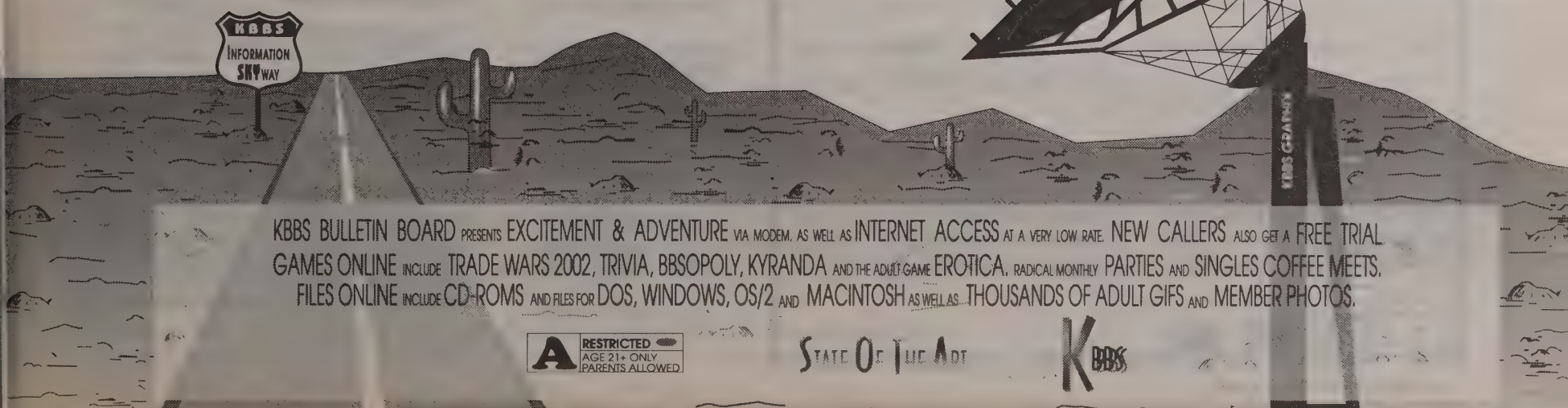
"TWO THUMBS UP!
Now show me these adult GIFs you were talking about."
- Sisky & Egbert

A Hi-tech action-packed
ADVENTURE!
via MODEM!

NOW APPEARING
VIA MODEM, PARAMS 8-N-1

NORTHRIDGE (818) 886-0872
NORTH HOLLYWOOD (818) 505-9848
VAN NUYS (818) 994-0442
GLENDALE (818) 507-1365
ARCADIA (818) 445-5051
AGOURA (818) 889-2546
CULVER CITY (310) 558-0145
COMPTON (310) 532-1700
MONTEBELLO (213) 725-3047
SIMI VALLEY (805) 520-7323
NEWHALL (805) 255-5006
SPECIAL ENGAGEMENT! For Phones listed below: At connect, type "...", hit <enter>, type ".KBBS"
SANTA ANA (714) 972-2314
FULLERTON (714) 441-1839
SAN JUAN CAPISTRANO (714) 248-2418
RIVERSIDE (909) 789-9726
WILMINGTON (310) 513-1636
PALMDALE (805) 265-0596
VENTURA (805) 641-2309





KBBS BULLETIN BOARD PRESENTS EXCITEMENT & ADVENTURE VIA MODEM, AS WELL AS INTERNET ACCESS AT A VERY LOW RATE. NEW CALLERS ALSO GET A FREE TRIAL.
GAMES ONLINE INCLUDE TRADE WARS 2002, TRIVIA, BBSOPOLY, KYRANDA AND THE ADULT GAME EROTICA. RADICAL MONTHLY PARTIES AND SINGLES COFFEE MEETS.
FILES ONLINE INCLUDE CD-ROMS AND FILES FOR DOS, WINDOWS, OS/2 AND MACINTOSH AS WELL AS THOUSANDS OF ADULT GIFS AND MEMBER PHOTOS.

A RESTRICTED AGE 21+ ONLY PARENTS ALLOWED

STATE OF THE ART

KBBS

Homes For Sale In SoCal. (714)990-4802. 8-N-1, 24 hrs. 300/1200/2400/9600. Free. [Exp. #123.]

Independent Computer Consultants Association. (714)871-3232. Forums, files, referrals. Free to all members of the general public. Sysop: Kenneth O. Leland. [Exp. #124.]

MacShak BBS. (714)373-0656. 24 hrs., 2400. Newly expanded Mac, amateur radio, consumer, and adult interests. Sysop: Dude B Narley. [Exp. #122.]

Sherlocktron. (714)492-0724. 8-N-1, 24 hrs., 2400. Sherlock Holmes BBS with lists of societies, publications, and purveyors. Sysop: Willis G. Frick. [Exp. #124.]

Viewlink BBS. (714)650-4612. 8-N-1, 24 hrs., 14,400. Latest shareware, hottest adult GIFs, temp jobs. 28¢ per hour. Sysop: Terry Andrews. [Exp. #123.]

805

The Late Show! (805)832-6173. 24 hrs., 14,400. 25,000+ files, three nodes. Echomail, political discussions, adult-related files. Intelec, UnitedNet/ RaceNet, CompuLink, NightNet, JixNet, and AbuNet. $10 per year and up. Sysop: Terry Moore. [Exp. #124.]

818

InvestorLink. (818)331-4611. 8-N-1, 24 hrs., 2400. Stocks, mutual funds, real estate, personal finance, daily news, commodity prices. Free. Sysop: Steve Painter. [Exp. #124.]

KeyHole BBS. (818)545-0870. 8-N-1, 300/1200/2400. Bring your Mac, UNIX, DOS questions or problems to us for a solution. Free. [Exp. #122.]

Momby Online. (818)912-7867. 8-N-1, 24 hrs., 2400/9600/14,400. Online children's stuff and other educational products. Free unlimited use. [Exp. #124.]

Techno Surfing BBS. (818)769-0691. Tournaments for games such as Falcon F16, War in Russia, etc. Game hints and more, adult section. Free. Sysop: Barry Lampert. [Exp. #124.]

Valley West BBS. (818)888-8419. 24 hrs., 2400/ 9600/14,400. 1.5GB online RIP graphics, games, nets. Multinode. [Exp. #122.]

Wizardry BBS. (818)222-4444. 1200/4800/9600/ 14,400. Online games, downloads, uploads, GIFs, text files. Free. [Exp. #122.]

909

Classifieds Online. (909)599-6153. 8-N-1, 24 hrs. Read and enter your private party ads FREE! Cars to computers to real estate. New ads daily. Sysop: Al Graham. [Exp. #124.]

CompuShopping Network. (909)613-1812. 8-N-1, 24 hrs., 2400/9600/14,400. Online catalog merchandise sales and much, much more. Free unlimited use. [Exp. #124.]

Diversified I/O BBS. (909)765-5795. 8-N-1, 24 hrs., 9600. Macintosh, home of SoftBackup II, help with disk and SCSI problems. Free. [Exp. #124.]

The Empire BBS. (909)980-2306. 24 hrs., 300/1200/ 2400/ 14,400. Chat, family and adult accesses, matchmaker, flower shop, free trial, files, SIGs. Sysops: Emperor and Tigana. [Exp. #124.]

BIG BIGGER BEST
♦ 18 gigs
♦ InterNet
♦ Adult
♦ FREE Software
♦ Local Phone #'s
310•822•0038
Compu-Net

Often imitated NEVER DUPLICATED
the MOTHERBOARD
Serving ALL of So. California
(1-800-862-3003)
1-800-TMB-3003
2.0 GB Library • CD Rom • 32 Chat Lines • Games • Public Forums • Matching • Member Photos • GIFS
NOISE FREE DIGITAL LINES!

FOR ADULTS ONLY
FREE ACCESS
H O T Sexy H O T
NO CREDIT CARD NEEDED
• Sexy Talk with Singles/Couples
• Over 100,000 Adult GIF, Shareware, Windows/DOS Files — updated daily!
• Unlimited Downloads • Call NOW!
USE YOUR MODEM TO DIAL
1-809-563-0116
Callers must be 21 or older! Long distance rates apply.

INTERNET
Express Access
Online Communications Service
FTP - Telnet- Mail - USENET News - IRC
Now all the resources of the Internet, the world's largest computer network, are available to any individual or business without having to be affiliated with the Government, a large company, or a university.
For as little as $12.50 per month, Express Access provides your own Internet address including 6 hours of daily connect time, 5 MB online storage, electronic mail, and all Usenet newsgroups. For a slightly higher fee, full internet services including FTP, Telnet, IRC, Gopher, and WWW are available. Extra connect time is $1 / hour and there are no additional charges based on modem speed.
Dial in now for instant access: (714) 377-9784 - North O.C.
(Serving anyone in the (714) area code) (714) 261-5201 - South O.C.
Settings: 8-N-1, 300-14.4 bps V.32,V.42 bis.
Login as "new", select "Instant Account" from the menu.
Digital Express Group
PO BOX 2705-314
Huntington Beach, CA 92649
Voice: (800) 969-9090
Fax: (301) 220-0477
E-mail: info@orange.digex.net
VISA MasterCard DISCOVER

NTELOG 22 Nodes BBS
OS2 ◦ DOS ◦ Windows
Win NT & Unix Files
400 + Conferences
Adult Files
Internet ◦ Usenet
Rime ◦ ILink Email
(408) 655-1096 2400 bps
(408) 655-8294 v.32bis
(408) 655-8297USR HST
(408) 655-4211 ZyXel 16.8k
(408) 655-8346 USR 16.8k

CARLIQUE GRAPHICS
WORLD FAMOUS GIF'S
ADULT CD'S
FREE CATALOGS
SUBSCRIBE ON-LINE
MasterCard VISA AMEX
408-847-0665

ware" at your disposal. "Freeware" amounts to software that has been written by aspiring programmers as a service to the computer community, and put in the public domain. These files are yours to use and distribute freely.

"Shareware" goes just a step beyond this. The "shareware" software is copyrighted, but the programmer is allowing you to use the program without obligation to decide if it's really for you. If you like it, use it, and generally think it's a great thing, you're on your honor to send a donation to the programmer. A suggested donation amount is usually included in documentation with the program package.

Posting files for other users is an important part of a user-supported BBS. The requested upload/download ratio for The Nocturnal Sanctuary is generally about one to five. All files available for download are automatically virus-scanned before they are posted.

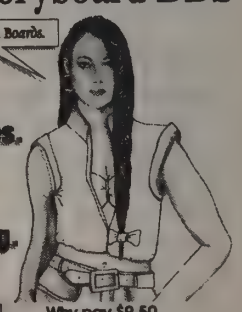
Online games available for your enjoyment will offer a great diversion from other normal BBS tasks. You may choose from a wide range of game types and compete for high scores with other system users that participate in the games. I was very impressed with the number of game choices from the games menu. Yes, there are the old BBS "stand-bys" like Solitaire, Blackjack, and Bowling. But this extensive games list will impress you with others such as Esterian Conquest, Motor City Drag Race, and Legend of the Red Dragon. You'll lose yourself for hours in these intriguing online games.

Chatting between nodes is a great way to exchange computer information with other users on a "real-time" basis. With a limited number of nodes (incoming phone lines), chatting with other users on TNS is not like the bigger BBSes with a teleconference, but will allow you to make some friends with the regulars. You'll greatly broaden your computer experience by sharing information with other "modem freaks."

The information available from this BBS is exceptional. I browsed through the information offered and selected high-speed modems. Wow! I had figured on a few tips for modem use. Wrong! I was confronted with more facts than I could ever want to know about modems; pages of text with every facet of modem setup and use you'd care to know.

It's rare to encounter such a wealth of information available to users on any BBS. TNS can be reached by calling (818)919-0777 and your call will be taken by the first available node. The standard BBS parameters of 8-N-1 will connect you. You'll be pleased with your experience on TNS. The Sysop and users here are a friendly bunch. You may find the normal "free" allotted time will fill your BBS needs. You may choose to subscribe for more online time. Either way, TNS will give you a great deal of BBS satisfaction. ■

Copyright ©1994 by John Wolcott. All rights reserved.

The Westwood Storyboard BBS
The Intelligent Choice in Computer Bulletin Boards.
Short Stories - Poetry.
Online Publishing.
Over 3000 Graphic Images.
Private Chat.
Online Networking.
Shareware, Over 650 Meg.
Real InterNet Access.

OUR SYSTEM HAS A DIRECT CONNECTION TO THE INTERNET WORLD-WIDE. WE CAN HELP YOU SAVE ON LONG DISTANCE CALLS. PAY ONLY $1.00 A MONTH, REACH EVERYWHERE...
Why pay $9.50 or $19.50 for InterNet & System Access? Call us first.
Call via modem: 24hrs.
(818) 760-3607 (818) 784-7042
(818) 885-6930 (818) 547-9288
(310) 204-1258 (310) 324-1340
(213) 295-2084 (714) 663-9033
PLUS Cybertron Entertainment
Real InterNet Access Only: $1 Per Month.
FREE 60 Day Look Around
Have your short stories or poetry published in our Magazine.
Call us today. The adventure is just beginning.

MAKE A DEAL! BUY OR LEASE!!

PENTIUM SCSI II EISA - PCI

- 256K Cache (Up to 512K)
- 4MB (70ns) RAM (Up to 128MB)
- 1.2MB Floppy Drive
- 1.44MB Floppy Drive
- 32 Bit PCI Bus SCSI Ctrl. & I/O
- SCSI Hard Drive 420MB
- Medium Tower Case w/230W Power Supply
- 32 Bit Diamond Viper PCI Bus 2MB
- 15" Super VGA Monitor, .28dp N-I
- 101 Key Enhanced Keyboard
- Mouse

Pentium 60MHz.. **$3025**

486 VL-BUS CAD SYSTEM

- 4MB (70ns) RAM & 256K Cache
- 1.2MB Floppy Drive
- 1.44MB Floppy Drive
- 32 Bit VLB IDE w/I/O (2S,1P,1G)
- 245MB IDE Hard Drive
- Mini Tower Case w/200W Power Supply
- 32 Bit Diamond Speedstar Pro VLB w/1MB
- 14" Super VGA Monitor, .28dp
- 101 Key Enhanced Keyboard
- Mouse

486DX-33MHz..... **$1355**
486DX2-66MHz **$1565**

486 ISA WIN-STATION

- 4MB (70ns) RAM & 256K Cache
- 1.2MB Floppy Drive
- 1.44MB Floppy Drive
- IDE w/I/O (2S, 1P, 1G)
- Mini Tower Case w/200W Power Supply
- 130MB IDE Hard Drive
- Trident 8900CL SVGA w/1MB
- 14" Super VGA Monitor, .28dp
- 101 Key Enhanced Keyboard
- Mouse

486DX-33MHz..... **$1185**
486DX-50MHz..... **$1325**
486DX2-66MHz..... **$1395**

486 PCI + ISA SYSTEM

- 4MB (70ns) RAM & 256K Cache
- 1.2MB Floppy Drive
- 1.44MB Floppy Drive
- 32 Bit PCI IDE Controller
- Mini Tower Case w/200W Power Supply
- 130MB IDE Hard Drive
- 32 Bit Genoa PCI Super VGA Card w/2MB
- 15" Flat Screen SVGA Monitor, .28dp
- MultiMedia 130MB IDE Hard Drive
- 101 Key Enhanced Keyboard
- Mouse

486DX-33MHz..... **$1585**
486DX2-66MHz..... **$1805**

386DX-40MHz (64K Cache) $225	**486SX-25MHz (64K Cache) $275**	**ALL SYSTEMS INCLUDE:** • Mini Tower Case • 200W Power Supply • 1MB RAM • Super I/O & IDE Card • 1.44MB Floppy Drive • 2 Serial, 1 Parallel, 1 Game • 101 Keyboard • Clock & Calendar • 1 Year Parts Warranty • Lifetime Labor Warranty • 72 Hours Burn-in Test	**486DX2-50MHz (256K Cache) $525**	**486DX-50MHz (256K Cache) $595**
486DX-33MHz (256K Cache) $465	**486DX-40MHz (256K Cache) $465**		**486DX2-66MHz (256K Cache) $655**	**486DX2-66MHz (Local Bus-256K Cache) $675**

ORIGINAL IBM PARTS & SERVICE
MACINTOSH UPGRADE & SERVICE AVAILABLE

UPGRADES

- Fax/Modem (9600/9600-2400) w/Windows Software **$45**
- Fax/Modem (14400/14400) w/Windows Software **$125**
- Internal Backup Drive 250MB **$145**

SOFTWARE SUPPORT FOR WINDOWS & DOS AVAILABLE

MONITORS

Monochrome 14"	$85
Mono VGA 14"	$109
SVGA 14" (.39mm)	$190
SVGA 14" (.28mm)	$229
SVGA 14" (.28mm N-I)	$249
SVGA 15" (.28mm N-I)	$369
SVGA 17" (.31mm N-I)	$635
NEC, Sony, MAG	CALL

PRINTERS

DOT MATRIX

Samsung 24 Pin	$159
Epson LQ 570+	$239

BUBBLEJET

Canon BJ-10ex	$255
Canon BJ-200	$355
Canon BJ-330	$589

DESKJET/LASER

HP 520 w/Cable	$275
HP 500C	$375
HP 560 w/Cable	$555
HP 4P (600dpi)	$939

LASERJET

HP 4	CALL
Epson Action 1500	$659
Oki 400E	$519

LEASE TO OWN YOUR COMPUTER! 100% TAX DEDUCTIBLE!!

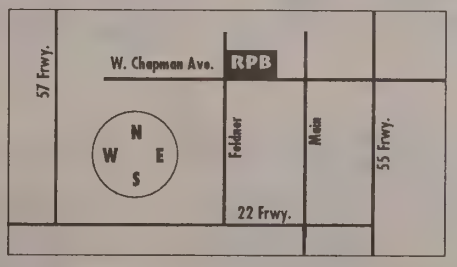
WE WELCOME CORPORATE ACCOUNTS, INDIVIDUAL LEASING, GOVERNMENT, SMALL BUSINESS, SCHOOLS, CONSULTANTS/EDP

RPB
COMPUTER SYSTEMS
714/978-7430

1627 Chapman Ave., Orange, CA 92668

VISA
MasterCard
Accepted

OPEN 6 DAYS A WEEK FOR YOUR CONVENIENCE
BUSINESS HOURS:
Mon. - Sat. 10am to 6pm



WHITE OAK EQUIPMENT LEASING

Prices subject to change without notice.

USER GROUPS

AMIGA

Amiga User Group Of Long Beach. Meetings: 1st Thurs., 7:00 pm, 5373 E. Second St., Belmont Shores (in the Fire Station Bldg.). Call: Larry, (310)429-0752. [Exp. #123.]

ATUG—San Gabriel Valley. Meetings: last Tues., 7:00 pm, Michelangelo's Pizza, San Dimas; 3rd Sat., 11:00 am, 1st Southern Baptist Church, Temple City. Call: Steve, (818)285-6424. [Exp. #124.]

LAAUG—Los Angeles Amiga User Group. Meetings: 3rd Wednesday, 7:30 pm. Veteran's Memorial Auditorium, Overland Ave. & Culver Blvd. Super SIGs, PD disks. Call: Kip Hammond, (310)390-3010. LAAUGLine BBS: (213)387-1002. [Exp. #123.]

APPLE

Champions Of The Mac Proletariat (CHOMP). Meetings: 4th Thurs., 7:30 pm, Cal Poly Pomona. Question and answer, raffle of useful software, opportunity to purchase disks. Call: Craig Richards, (909)985-7385. [Exp. #123.]

ATARI

ATESIG—Atari 8-Bit SIG. Meetings: 145 Surf Pl., Seal Beach. Cooperative group for Model Railroad applications. Call: (310)430-5433. [Exp. #123.]

COMMODORE

Commodore Technical Users Group (C=TUG). Meetings: 4th Sunday, 1:00 pm, Senior Citizen Center, 170 S. Olive St., Orange. Public domain library, documents library, and magazine. Software and hardware help. Call: Lou Palush, (714)532-1802. [Exp. #123.]

South Bay Commodore Users Group. Meetings: 3rd Thurs., 7:00 pm. S.C.E Redondo Generating Station, 1100 Harbor Dr. (across from King Yatch Harbor). Support for 64/128 computers. Open to all users of Commodore Computer equipment and those who would like to receive or exchange information on programs, applications, or hardware. Call: Dave LeGalley, (310)324-8357. [Exp. #123.]

CORELDRAW

Corel (ACAD) User Group. Meetings: 2nd to last Tues., 7:00 pm, Glendale Federal Bank Building, 401 N. Blvd. Product demos, Q&A. Call: Art, (213)935-1958. [Exp. #124.]

IBM & COMPATIBLES

Greater South Bay PC User Group. Meetings: 2nd Thurs., 7:30 pm, Torrance Recreation Center located behind the main city library, Torrance. Visitors welcome. Call: (310)329-2804. [Exp. #124.]

Orange County IBM PC Users Group. Meetings: 2nd Tuesday, 6:30 pm. Computer Learning Center, 1240 S. State College Blvd., Anaheim. Speakers, software, newsletter. Open to public, all welcome. Call: (714)990-0580. [Exp. #123.]

Pasadena IBM User Group. Meetings: 3rd Wed., 7:00 pm, 2184 N. Lake Ave., Altadena. Speakers on hardware/software, SIGs, library, newsletter, and BBS. Call: Steve Bass, (818)791-1300. [Exp. #123.]

San Bernardino PC Users Group. Meetings: 1st Wednesday, Jack Brown Hall, Rm. 129, Cal State University, San Bernardino. Specializing in IBM and compatibles. Free admission. Call: Arthur Saltzman, (909)880-5755. [Exp. #127.]

Thousand Oaks Personal Computer Club (TOPCC). Meetings: 3rd Thurs., 6:30 pm, Goebel Senior Adult Center, 1385 E. Janss Rd., Thousand Oaks. Call: (805)523-1924. [Exp. #123.]

TUG-NET. Meetings: Every Thurs., 7:00 pm, Glendale Federal Bank, 7119 Topanga Cyn., Canoga Park. Ample parking. Call: (818)249-1629. [Exp. #126.]

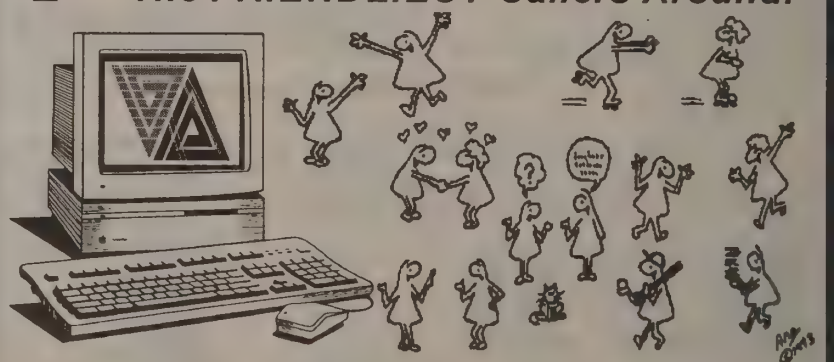
Valley Computer Club. Meetings: 1st Wed., 7:00 pm,

Continued on page 192

Amateur Action "Live"
ONE•ON•ONE HOT TALK 24hrs./day
1•800•469•7588 $3.99/min. 18 yrs. & older
LIVE PSYCHIC HOTLINE 24 hrs./day
Advice & Predictions: Love, Sex, Marriage & Money
1•800•909•LIVE $3.99/min 18 yrs & older
(5483) No CC Needed

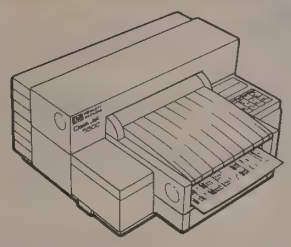
Amateur Action BBS
World's Largest Collection of Amateur Adult GIF Files.
Over 20,000 GIFs on line.
"The Information Super Highway"
"The Nastiest Place On Earth"
(408) 263-3393 14,4000 HST
(408) 263-1868 21,600 HST
40 High Speed Lines
US Robotics Dual Standard Modems on all 40 lines
Easy Connection! No Waiting!
VISA DISCOVER MasterCard

The ANNEX!
...Your On-Line Community
- FREE 15 Day, Risk-Free Trial!
- A FULL Range of On-Line Services
- Our Convenient Voice Support Line
- Social Events, Parties & More!
- Multi-User Games & GIGS of Files!
- INTERNET Netmail & Newsgroups
- 66 Lines Serving Southern California!
- *The FRIENDLIEST Callers Around!*

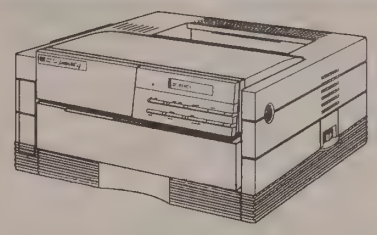


Call 1-800-GO-ANNEX Voice, for a # Near You!
(818)786-5600 VIA MODEM

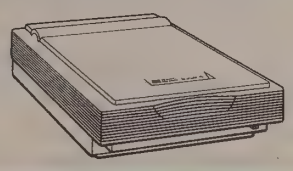
NEW TECHNOLOGIES



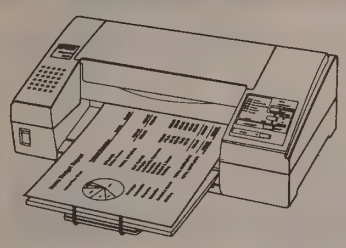
HEWLETT PACKARD
Authorized Dealer



HP DeskJet 310	PRHE004	$ 285
HP DeskJet 520	PRHE071	279
HP DeskJet 560C	PRHE072	539
HP DeskJet 1200C	PRHE135	1345
HP DeskJet 1200C PS	PRHE161	2043
HP ScanJet IICX	IOHP019	$ 894



HP LaserJet 4L	PRHE125	$ 625
HP LaserJet 4ML	PRHE147	955
HP LaserJet 4P	PRHE175	915
HP LaserJet 4MP	PRHE177	1275
HP LaserJet 4	PRHE091	1319
HP LaserJet 4M	PRHE098	1795
HP LaserJet 4Si	PRHE128	2775
HP LaserJet 4SiMX	PRHE148	4095



EPSON®

LX-810	PREP016	$ 159
FX-870	PREP072	266
FX-1170	PREP084	349
LQ-570	PREP100	231
LQ-870	PREP046	435
LQ-1070	PREP054	356
LQ-1170	PREP047	602
Stylus 800	PREP090	311
EPL-8000	PREP063	847
Action Laser 1000	PREP082	643
Action Laser 1500	PREP088	646
ES600C Scanner	IOEP009	766
ES800C Scanner	IOEP011	1040
DFX-8000	PREP051	2199

The smartest design. The smartest buy.

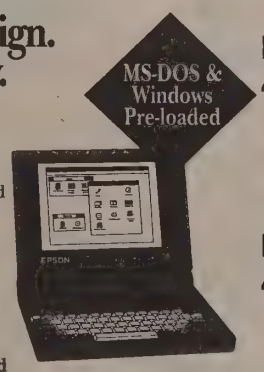
Affordable, full-featured 486
- Handsomely-designed
- High-end computing features
- Surprisingly low price
- Carrying case and trackball included

Smaller and lighter
- 5.5 lbs. including battery

Choice of configurations
- 80MB, 120MB or 180MB HDD with one 3.5" 1.44MB floppy disk drive
- Data/fax modem option available

Large screen, comfortable keyboard
- 10" backlit LCD screen with 640 x 480 resolution

Expandability
- 4MB RAM, expandable to 8MB



EPSON ActionNote 4SLC/33
120MB HD w/Fax Modem
$ 1495

EPSON ActionNote 4SLC2-50
180MB HD w/Fax Modem
$ 1595

EPSON ActionNote 4SLC/33

170 MB HD	w/Fax Modem
$ 1395	$ 1545

Conner IDE		
200 MB	HDCO004	$ 214
250	HDCO013	227
340	HDCO016	279
425	HDCO002	321
Maxtor IDE		
245 MB	HDMA008	237
540	HDMA006	436
Western Digital IDE		
200 MB	HDWE005	219
340	HDWE006	283
Quantum IDE		
340 MB	HDQU003	275

CTX

5439 14" .39	$ 200
5468 14" .28	238
1451 14" .28 NI	285
1460 14" .28 72Hz	325
1461 14" .28 72Hz	310
1560 15" .28 NI	395
1561 15" .28 NI LR	375
1760LR 17" NI	665

SONY

GDM - 17se	$ 1095
GDM - 2036s	$ 1795
GDM - 2038	$ 1895

OKIDATA

OL410e 600 DPI	PROK060	$ 691
OL400e	PROK064	505
ML590	PROK048	410
ML591	PROK046	559

TERMS AND CONDITIONS:
Prices Reflect 3% Cash Discount
Prices Subject to Change without Notice
Subject to Credit Approval - All Sales Final
California Shipping Address Must add Appropriate Sales Tax
Corporate,Government,and School PO's Welcome - COD Orders Accepted

PASADENA	461 N. Lake Ave.	(818)356-0391	or Fax	(818)356-0068
ROWLAND HEIGHTS	19230 E. Colima Rd.	(818)965-7004		(818)913-6936
SANTA FE SPRINGS	11861 E. Telegraph Rd.	(310)948-2060		(310)942-0440

Store Hours: M-F 9am-7pm, Sat. 10am-6pm, Sun. 12pm-5pm, - SFS Closed Sun.

Don't miss your chance to get involved in the largest computer event in Southern California. Some prime locations still available!

The San Diego COMPUTER FAIR·1994

If you want to show and sell your products to more than 25,000 people who love computers, you need to be in the Computer Marketplace of The San Diego Computer Fair '94.

Here's how to sell your products at The San Diego Computer Fair '94:

The Computer Marketplace

The Computer Marketplace is an exhibit hall, but distinctly different from what you'll find in any other computer show. The price for space in the Computer Marketplace is $900 for a regular booth, and $1,200 for a corner booth. The vendors in the Computer Marketplace are free to sell products and services, and market their businesses.

Last year, vendors in the Computer Marketplace were overwhelmed with business from our 22,000 attendees. This year, as we gear up for well over 25,000 attendees, don't be left out of the Computer Marketplace!

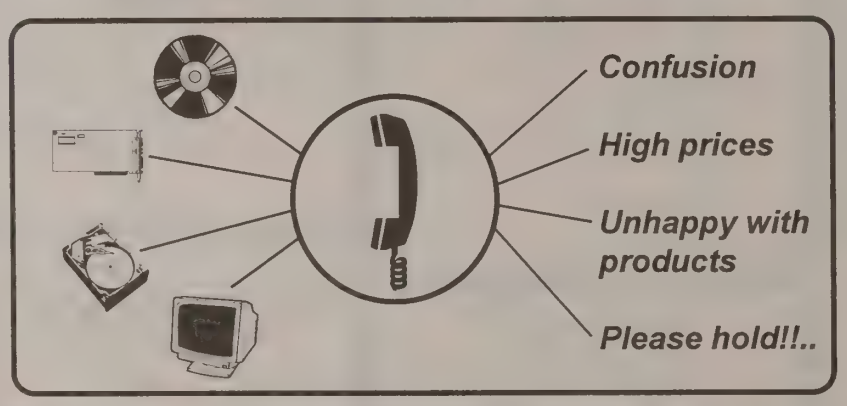
Contact AnnMarie Santoro at **800-573-FAIR** for more information and booth reservations. For a copy of the Marketplace floorplan and reservation form, fax **619-573-0094** and request documents 109 and 110.

WANTED: Brilliant, Witty Computer Geniuses

The Seminar Committee of The San Diego Computer Fair '94 is looking for seminar speakers with expertise in subjects as diverse as Accounting and Virtual Reality. If San Diegans can benefit from your knowledge, contact Josie Hairgrove or Kendra Cole at *ComputorEdge*, (619) 573-0617, and ask how to submit a Seminar Proposal.

The San Diego Computer Fair is cosponsored by the San Diego Computer Society and *ComputorEdge* Magazine.

You'll SAVE TIME & MONEY



GUARANTEE BIG SAVING
NO HEADACHE FOR SHOPPING AROUND
NO HIDDEN CHARGES
NO DECEPTIVE ADVERTISEMENT
NO OVER COMMITMENT
NO LONG CALL WAITING

Your job is to tell us your requirements
Our job is to give you the best factory low prices

One year free parts & labor warranty. Technical support & information. On time delivery / pickup from our centers.

Your agent: CMOS Computer Mail Order Services
24419 Hawthorne Blvd.
Torrance, CA 90505
Phone: 310-373-1278

CO-OPERATIVE COMPUTER USER CLUB

Be a club member and become a smart buyer.
By just paying $39.00 annual fee and
3% commission on every purchase invoice.

Fill out the following perforation below and mail to us or call us at 310-373-1278 for a:

FREE information kit with this month *KILLING* price list

PLEASE MAIL ME A FREE INFORMATION KIT WITH THIS MONTH ***KILLING*** PRICE LIST.

Name_____
(Please write clear)

Address_____

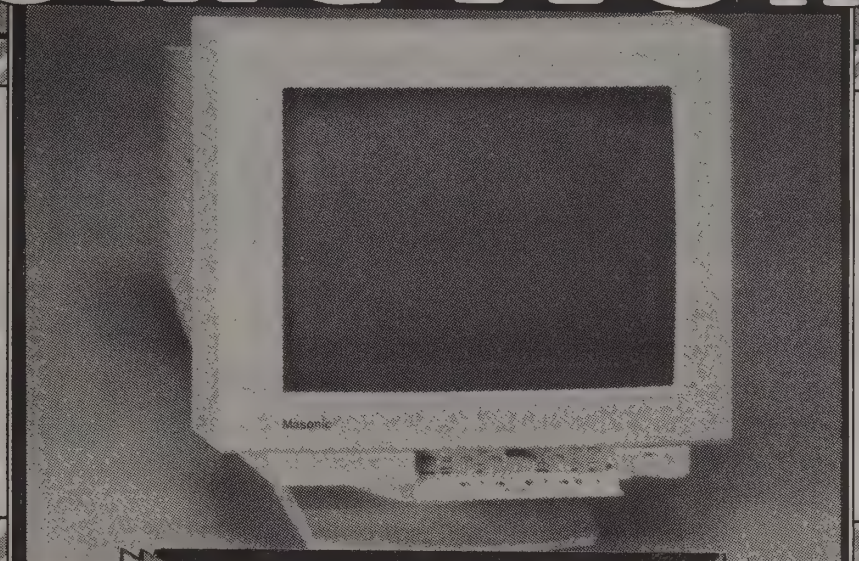
_____

Phone_____ Work_____

Mail to: M/S CMOS
24419 Hawthorne Blvd., Torrance, CA 90505
Phone: 310-373-1278

MASONIC MONITOR

- 14" & 15" CRT Size
- .28mm Dot Pitch
- Flat Screen CRT Type
- Agras CRT Surface
- 1280 x 768 Resolution
- Energy Saving



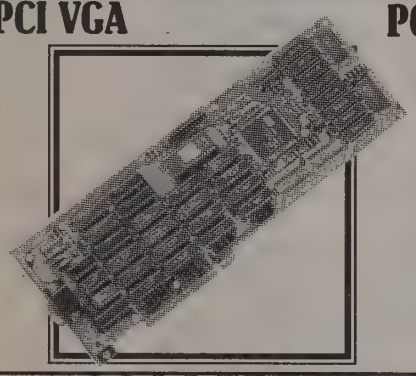
- Non-Interlaced
- Digital Control
- Contrast/Brightness
- V-Centering/V-Size
- H-Phase & H-Width
- 115/230 Select

Masonic 1564MCLR

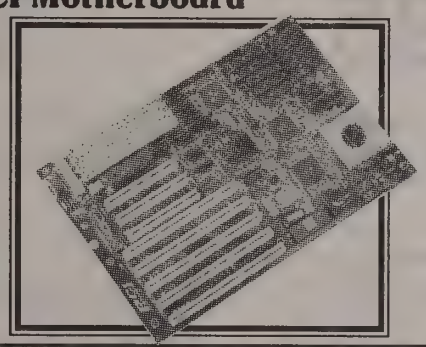
PCI Total Solution

IDE with I/O

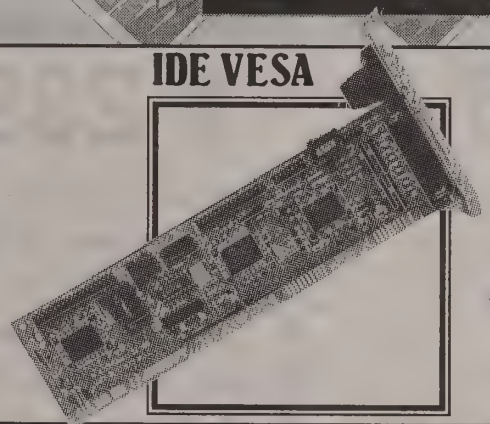
PCI VGA



PCI Motherboard



IDE VESA

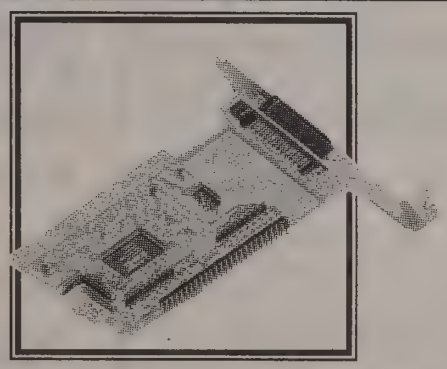


IDE ISA

Call for Special Pricing!

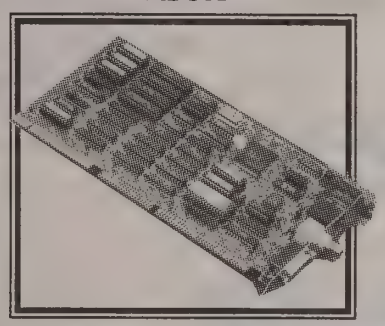
PCI IDE

PCI SCSI

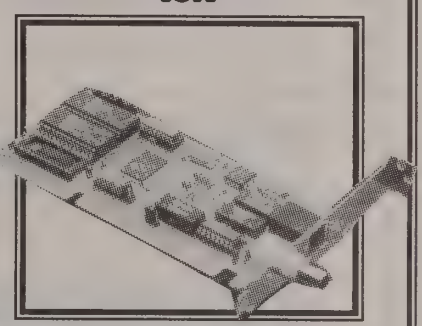


Network Card

VESA



ISA



EURONE LA

2654 Durfee Ave. • El Monte, CA 91732

Tel: 818/575-5953 Fax: 818/575-3550

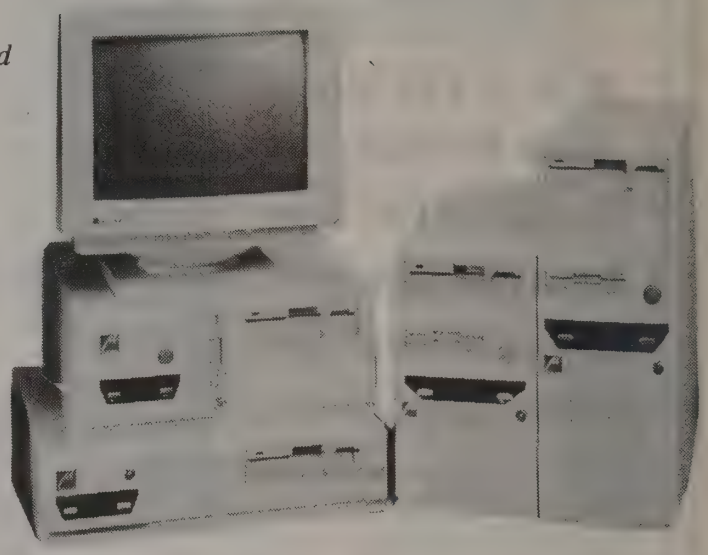
Eurone SA	Compumann	Eurone Taiwan	Eurone Thai	Eurone HK
France	Germany	Taipei	Thailand	Hong Kong
Tel. 33-1-4972-0808	Tel. 49-40-786-450	Tel. 886-2-581-1723	Tel. 66-2-261-3287(9)	Tel. 852-687-1202
Fax 33-1-4972-0762	Fax 49-40-786-458	Fax 886-2-571-1872	Fax 66-2-261-3290	Fax 852-607-1009

WISE INVESTMENT

Buying a computer is a big investment for most folks. In today's tough economy, where every dollar must go a long way, the computer you buy must be worth every hard-earned dollar you spend. It's a difficult decision. Should you pay the premium price for brand names or save a little by risking getting a collection of cheap and low-quality parts or some close-out of obsolete products.

Now here's a tip ...

MAI Computer has been manufacturing reliable, high-performance personal computers for business and corporate users since 1990. To expand our market segment, we're offering these pre-configured computers at our lowest prices ever. These are the same quality built computers we have manufactured for corporations and businesses but at much lower prices. These computers are brand new and the designs incorporate the newest technological advances and genuine INTEL microprocessors for best performance possible. Our professional, courteous, and knowledgeable staff will provide you with the best service you've experienced in this industry which further enhances the value of owning one of these computers. INVEST YOUR MONEY WISELY.



66-MHz 486 VLB

$ 1295

- ***Professional system for power users***
- *INTEL 66-MHz **486dx2** processor*
- *built-in 66-MHz math coprocessor*
- ***4 Mbytes memory** installed*
- ***210 Mbytes hard drive***
- *1.44Mb 3.5" **TEAC** floppy drive*
- ***32-bit Local-Bus graphics accelerator** w/ 1Mb (1280x1024 max.; 16 million colors max.)*
- ***14" 1024-NI .28mm SVGA monitor***
- *2 serial, 1 parallel ports*
- *mini tower case*
- *101-key enhanced tactile keyboard*
- *high-resolution serial mouse w/ pad*

Pentium / PCI

$ 2395

- ***Ultimate CAD/CAM station***
- *Genuine **INTEL Pentium/PCI** system board w/ 3 **PCI** slots*
- ***INTEL 60-MHz Pentium processor***
- ***8 Mbytes memory** installed*
- ***340 Mbytes hard drive***
- *1.44Mb 3.5" **TEAC** floppy drive*
- ***GENOA Phantom/PCI graphics accelerator w/ 2 Mb** video memory*
- ***15"FS 1280-NI .28mm SVGA monitor***
- *2 hi-spd serial ports + 1 parallel port*
- *mid tower w/ 230W UL power supply*
- *101-key enhanced tactile keyboard*
- *high-resolution serial mouse w/ pad*

33-MHz 486 VLB

$ 985

- ***Ideal for homes & small businesses***
- *genuine **INTEL 33-MHz 486sx** processo*
- *same performance as 486dx-33 with optional math coprocessor support*
- ***4 Mbytes memory** installed*
- ***170 Mbytes hard drive***
- *1.44Mb 3.5" **TEAC** floppy drive*
- ***32-bit Local-Bus graphics accelerator** w 1Mb (1280x1024 max; 16 million colors max)*
- ***14" 1024-NI .28mm SVGA monitor***
- *2 serial, 1 parallel ports*
- *mini tower case*
- *101-key enhanced tactile keyboard*
- *high-resolution serial mouse w/ pad*

Add-On Specials

Colorado 250Mb 3.5" internal Tape Back Up unit ..... $ 149

MICROSOFT serial mouse ..... $ 19

Genius 2-button mouse ..... $ 9

14.4Kb int. FAX/MODEM ..... $ 99

Performance Doubler Kit ..... $ 395

(doubles the speed of your 486DX-33 computer; includes installation; limited offer)

MultiMedia Packages

Package A (Double-Speed) ..... $ 285

(Sound-Blaster-Pro/Deluxe stereo sound card; Double-speed 250-ms internal CD-ROM; stereo speaker set; 4-title CD)

Package B (Triple-Speed) ..... $ 535

(Audio-Spectrum-16 16-bit stereo sound card; NEC Triple-speed 195-ms internal CD-ROM; stereo speaker set; 4-title CD)

MONTHLY SPECIAL

Low-Rad SVGA Monitor ..... $ 219

(14" 1024x768 Non-Interlaced; .28mm)

420 Mbyte Hard Disk Drive .. $ 285

540 Mb Hard Disk Drive ..... $ 419

(MAXTOR 540A; 8.5ms; IDE)

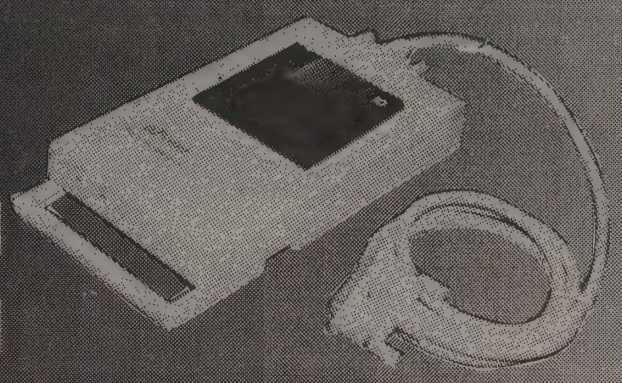
1.06 Gb 9ms SCSI-2 Drive .... $ 735

MAI COMPUTER 310-944-6843

11947 E. Florence Ave. #6, Santa Fe Springs, CA 90670

4/94

PORTABLE HARD DRIVE



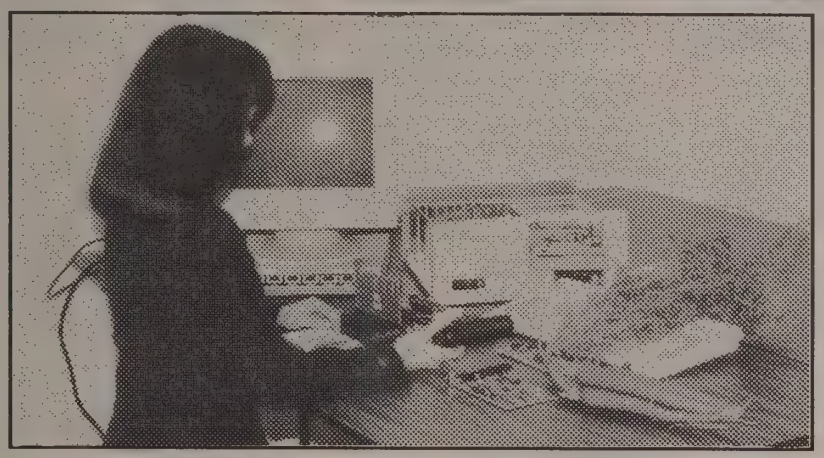
ULTRA FAST EXTERNAL HD BACKUP

- *UP TO 500+MB CAPACITY
- *CONNECT TO THE PRINTER PORT
- *FAST PERFORMANCE, XCOPY 250MB TAKES ONLY 30MIN
- *CAN BE CONFIGURED AS PRIMARY OR SECONDARY HARD DRIVE FOR THE DESKTOP OR NOTEBOOK COMPUTER
- *CO-EXISTS WITH THE CURRENT HARD DRIVE IN THE SYSTEM
- *100% DOS & WINDOWS COMPATIBLE
- *MADE IN USA

ALSO AVAILABLE AT: IRVINE 714-252-8494, PASADENA 818-793-0518, TORRANCE 310-325-9701

PORTABLE HARD DRIVE BARE KIT WITHOUT HD
$199 (Requires IDE HD)

COMPLETE KIT WITH HARD DRIVE!
170MB.....$411
340MB.....$509
540MB.....$780



• You Pick The Parts & We'll Build Them Together •

BUILD YOUR OWN COMPUTER CLASS

This class is designed to provide a hands-on knowledge of the internals of a 386/486 compter system. It will cover the basics of a computer system. Discussions will include motherboard, hard drive, video card, controller card. . . etc. Inside the 4 hour course, you will have the experience to assemble a computer system.

CLASS A: 4/23/94 5pm to 7pm & 4/30/94 5pm to 7pm
CLASS B: 5/7/94 5pm to 7pm & 5/28/94 5pm to 7pm
CLASS C: 5/21/94 5pm to 7pm & 5/28/94 5pm to 7pm

FEE: $150 per person
CLASS LOCATION: Culver City, For Info Call 310-313-4540

486DX2/66 SYSTEM TO GO

- INTEL 486DX2/66 CPU
- 256k cache memory
- VESA Local Bus w/3 VLB
- 8 MB Memory, 60NS
- Diamond Speedstar Pro VLB Windows Accelerator card w/1MB
- 170MB IDE HD
- VLB IDE/FD controller
- 2 serial, 1 parallel & 1 game port
- 5.25" 1.2MB TEAC floppy
- 3.5" 1.44MB TEAC floppy
- 14" 0.28 NI Monitor Super VGA
- Desktop case w/230 watts PS
- FOCUS 2001 keyboard

$1648

*For Larger Hard Drive & 2MB Video Card Upgrade. . . Please Call.

486SX/33MHz CPU SYSTEM TO GO

- Intel 486SX/33MHz CPU
- 256k Cache
- VESA Local Bus W/3 VLB
- 4MB Memory, 60NS
- Diamond Speedstar Pro VLB Windows Accelerator W/1MB
- 170MB IDE Hard Drive
- VLB IDE/FD Controller
- 2 Serial, 1 Parallel & 1 Game Port
- 5.25" 1.2MB TEAC floppy
- 3.5" 1.44MB TEAC floppy
- 14" 0.28 NI Monitor Super VGA
- Mini Tower case w/230 Watts P.S.
- Focus 2001 Keyboard

$1199

We provide on site training (DOS & Windows) at a reasonable rate with our systems. Please call for details.

EVERYDAY LOW PRICES

486VL Motherboard 256k/3 VL

* 486DX33	$405
* 486DX2/66	$605
* 486SX33	$260

SUPER VGA MONITOR

* 14" 1024x768 0.39 I	$209
* 14" 1024x768 0.28 NI	$269
* 15" 1280x1024 0.28 NI flat screen	$385

ACCESSORIES

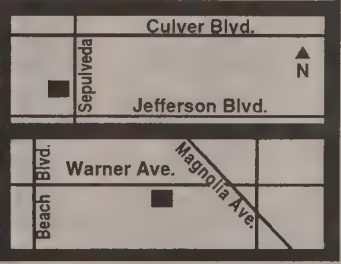
1.2MB/1.44MB floppy drive	$52/45
3 button serial mouse	$13
Sound Galaxy BXII w/speakers (Sound Blaster comp.)	$67
1MB SVGA card	$65
486 CPU Cooling fan w/heatsink	$18
DIAMOND VIPER w/2MB VRAM	$395
IDE/2HD/2FD/IO Controller	$19
96/24 internal fax modem	$39
14.4k int. fax modem w/OCR	$129
Dual fan Full size Vertical case w/250 watts PS	$110
FUJITSU FKB4700 keyboard	$55
387 Math CoProcessor 40MHz	$70
Trackball	$39

CARROT COMPUTER

We do 386 & 486 Upgrade & Repair Services.

LOS ANGELES AREA:
4911 SEPULVEDA BLVD.
CULVER CITY,
CA 90230
TEL: (310) 313-4540
FAX: (310) 313-4542

ORANGE COUNTY:
8908 WARNER AVENUE
FOUNTAIN VALLEY,
CA 92708
TEL:(714)375-4771
FAX: (714) 375-4773



ESSENCE GROUP

IRVINE (714) 580-6993
FOUNTAIN VALLEY (714) 546-3110

ESSENCE 486/33 VLB Bus

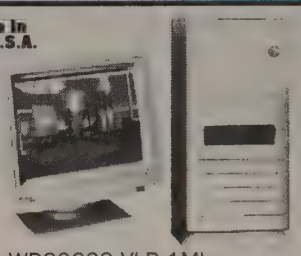
$999

- Opti 486VLB MB w/128K w/ 2VLB Slots
- **Intel 486SX-33Mhz CPU**
- **4Mb RAM, 210Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- Trident 9200 VLB SVGA 1Mb Graphics Accelerator
- **14" 1024x768 SVGA Monitor**
- 101 Key Enhanced Keyboard
- CS-609T Mini-Vertical Case w/230Watt Power Supply

Vega 486/50 VLB Bus

Made In The U.S.A.

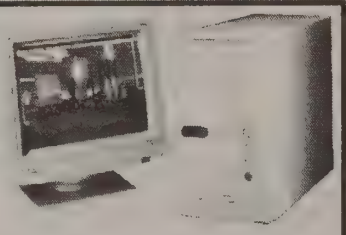
$1399



- Vega 486VLB M/B w/256K Cache/ZIF
- **AMD 486DX2-50Mhz CPU**
- **4Mb RAM, 250Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- WD90C33 VLB 1Mb Graphics Accelerator
- **14" 1024x768 SVGA Non-Interlaced Monitor**
- 101 Key Enhanced Keyboard
- CS-230 Mid-Vertical Case w/250Watt Power Supply

ESSENCE 386DX 486DLC

386DX-40 .. $ 989
486DLC-40 $1039

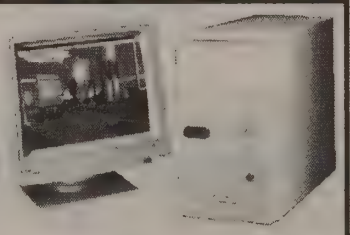


- Opti 386 Motherboard w/ 128K Cache, **AMD 386/40 or TI 486DLC/40 CPU**
- **4Mb RAM, 210Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- Trident 8900 SVGA 1Mb Graphics Accelerator
- **Digiview 1401 14" SVGA 1024x768 Monitor**
- 101 Key Enhanced Keyboard
- CS-609T Mini-Vertical Case w/230Watt Power Supply

IBM 486/66 VLB

Made In The U.S.A.

$1259



- IBM VLB Motherboard w/ IBM 486 SLC2-66Mhz CPU & Math- Coprocessor
- **4Mb RAM, 210Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- GD-5428 VLB 1Mb SVGA Graphics Accelerator
- **Digiview 1431 14" SVGA Non-Interlaced Monitor**
- 101 Key Enhanced Keyboard
- CS-609T Mini-Vertical Case w/230Watt Power Supply

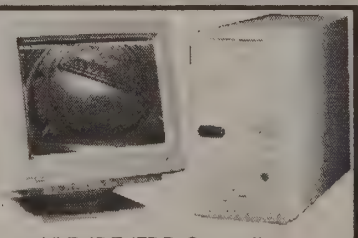
ESSENCE 486 VLB SX/DX/DX2

486DX2-50 ..... $1299
486DX-40 ..... $1299
486DX-33 ..... $1259
486SX-33 ..... $1189
486SX-25 ..... $1169

- Opti 486 Motherboard w/ 128K Cache & CPU
- **4Mb RAM, 250Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- Trident T9400 VLB SVGA 1Mb Graphics Accelerator
- **Optiquest 1000S 14" SVGA Non-Interlaced Monitor**
- 101 Key Enhanced Keyboard
- CS-609T Mini-Vertical Case w/230Watt Power Supply

ESSENCE 486 VLB DX/DX2

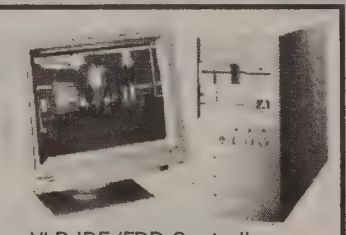
486DX2-66 ... $1599
486DX-50 ..... $1669
486DX2-50 ... $1479
486DX-40 ..... $1479
486DX-33 ..... $1439



- Opti 486 Motherboard w/ 256K Cache, ZIF & CPU
- **4Mb RAM, 340Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- WD90C33 VLB SVGA 1Mb Graphics Accelerator
- **Optiquest 2000DX 15" SVGA NI Digital FST Monitor**
- 101 Key Enhanced Keyboard
- CS-609T Mini-Vertical Case w/230Watt Power Supply

Acer AOpen 486 VLB Bus

486DX2-66 ... $1519
486DX2-50 ... $1409
486DX-33 ..... $1369
486SX-33 ..... $1279
486SX-25 ..... $1259

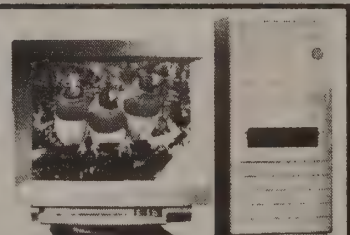


- AOpen 486 Motherboard w/ 256K Cache, ZIF & CPU
- **4Mb RAM, 340Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- Acer AOpen L28 VLB SVGA 1Mb Graphics Accelerator
- **AcerView 34T 14" SVGA Non-Interlaced Monitor**
- Acer 101 Key Keyboard
- Acer AOpen Mini-Vertical Case w/230Watt Power Supply

Vega 486 VLB Bus

Made In The U.S.A.

486DX2-66 ... $1749
486DX2-50 ... $1639
486DX-40 ..... $1629
486DX-33 ..... $1589



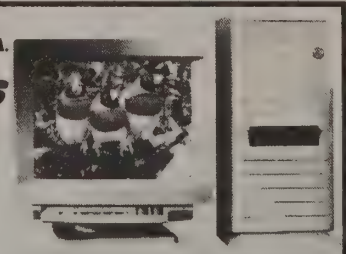
- Vega 486VLB M/B w/256K Cache/ZIF & CPU
- **4Mb RAM, 340Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- **Orchid Kelvin 64 VLB 1Mb Graphics Accelerator**
- **Mitac L1564PD 15" SVGA NI Digital On Screen FST Monitor**
- 101 Key Enhanced Keyboard
- CS-230 Mid-Vertical Case w/230Watt Power Supply

AIR 486 VLB Bus

Made In The U.S.A.

Advanced Integration Research, Inc

486DX2-66 ... $1879
486DX2-50 ... $1769
486DX-33 ..... $1719
486SX-33 ..... $1649
486SX-25 ..... $1629

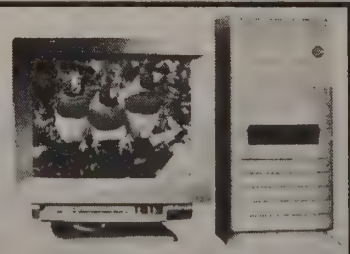


- AIR 486VLB M/B w/256K Cache/ZIF & CPU
- **4Mb RAM, 420Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- **Orchid Kelvin 64 VLB** SVGA 1Mb Graphics Accelerator
- **ViewSonic 15 15" SVGA NI Digital FST Monitor**
- 101 Key Enhanced Keyboard
- CS-230 Mid-Vertical Case w/230Watt Power Supply

Vega 486 PCI/VLB

Made In The U.S.A.

486DX2-66 $2089
486DX2-50 . $1979
486DX-40 .. $1929



- Vega 486PCI/VLB M/B w/256K Cache/ZIF & CPU
- **4Mb RAM, 340Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- **Orchid Kelvin 64 PCI** SVGA 1Mb Graphics Accelerator
- **ViewSonic 15 15" SVGA NI Digital FST Monitor**
- 101 Key Enhanced Keyboard
- CS-230 Mid-Vertical Case w/230Watt Power Supply

Kenitec NP-602 Notebook

intel inside

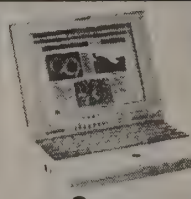
$1199

Features:
Intel SL Enhanced 486SLC-33Mhz CPU, 4mb RAM, 130mb HDD,Built-in "Palm Rest" Trackball, 10" 32 Gray Scale VGA Compatible LCD Display, Internal 1.44Mb Floppy Disk Drive, Complete w/ Carrying Case & Charger.

MITAC 486/25 Subnotebook

intel inside

$1399



Features:
Intel SL Enhanced 486SX-25Mhz CPU, 4mb RAM, 130mb HDD,Built-in "Palm Rest" Trackball, 9.5" 64 Gray Scale Dual Scan LCD Display, Removable Drive System, **2 PCMCIA Slots.**

MITAC 486/33 Color

intel inside

$1788

Features:
Intel 486SX
33Mhz CPU, 4mb RAM, 120mb HDD, 5.9lbs, Digital Controls, Passive Matrix Color, Windows Accelerator, Built-In Trackball, Optional Mini-Docking Station

MITAC 486/25 Mono

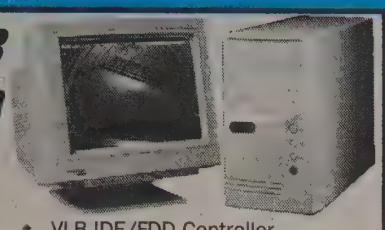
intel inside

$1288

Features:
Intel 486SX
25Mhz CPU, 4mb RAM, 120mb HDD, 5.9lbs, Digital Controls, Mono VGA, Built-In Trackball, Optional Mini-Docking Station

Coming Soon "ESSENCE Anaheim"

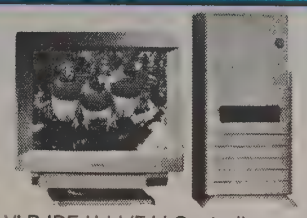
ESSENCE 486 VLB Multi-Media



486DX2-66 ... $1869
486DX2-50 ... $1739
486DX-33 ..... $1659
486SX-33 ..... $1599
486SX-25 ..... $1569

- Opti 486 Motherboard w/ 256K Cache, ZIF & CPU
- **4Mb RAM, 250Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- WD90C33 VLB SVGA 1Mb Graphics Accelerator
- VLB IDE/FDD Controller
- **Optiquest 2000DX 15" SVGA NI Digital FST Monitor**
- Pro-Audio Spectrum 16 16bit Sound Card
- Sony 33A (2X) Speed CD-Rom
- CS-150 Speakers w/4CD Titles
- 101 Key Enhanced Keyboard
- CS-609T Mini-Vertical Case w/230Watt Power Supply

Vega 486 VLB Multi-Media



486DX2-66 .... $2469
486DX2-50 .... $2339
486DX-40 ..... $2309
486DX-33 ..... $2259

- VEGA 486 Motherboard w/ 256K Cache, ZIF & CPU
- **4Mb RAM, 340Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- **Orchid Kelvin 64 VLB 1Mb Graphics Accelerator**
- VLB IDE Hdd/Fdd Controller
- **Mitac L1564PD 15" SVGA NI Digital On Screen FST Monitor**
- Pro-Audio Spectrum 16
- **FAST** Toshiba 3401 Internal 200ms, (2X) Speed CD-Rom
- CS-800 Speakers w/6CD Titles
- 101 Key Enhanced Keyboard
- CS-230 Mid-Vertical Case w/250Watt Power Supply

Panasonic Office Automation OA

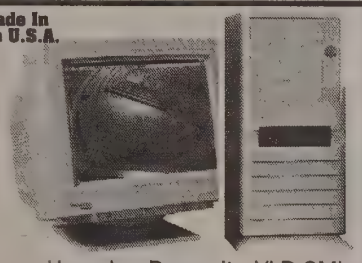
Double Speed

Panasonic's **FAST** Internal CD-ROM, (2X) Double Speed, 320ms Access, Caddyless.

CD-ROM Only ... $139
CD-Rom with Sound Blaster 16 & 2 Games ... $269

MICRONICS COMPUTERS INC. Made In The U.S.A.

486 VLB Bus

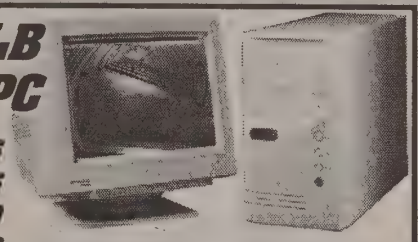


486DX2-66 .. $2299
486DX2-50 .. $2099
486DX-33 .... $2049
***486SX-33 .. $1829**

- MX-30 486VLB M/B w/ 256K Cache, ZIF & CPU
- **4Mb RAM, 340Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- Hercules Dynamite VLB 2Mb Graphics Accelerator
- **MAG DX-15F 15" SVGA FST Non-Interlaced Monitor**
- 101 Key Enhanced Keyboard
- CS-230 Mid-Vertical Case w/230Watt Power Supply

* 486SX-33 Systems Have ***No*** Cache Memory

ESSENCE 486 VLB Green PC



486DX4-100 . $2095
486DX4-75 ... $2015
486DX2-66 ... $1689
486DX2-50 ... $1579
486DX-33 ..... $1524

- **GREEN** 486 MB w/256K Cache, ZIF & CPU
- **4Mb RAM, 340Mb HDD**
- TEAC 1.2Mb & 1.44Mb
- 2 Ser./1 Par./1 Game
- VLB IDE/FDD Controller
- Acer Aopen L28 **GREEN** 1Mb Graphics Accelerator
- **Optiquest 2000DS 15" SVGA NI Digital GREEN Monitor**
- 101 Key Enhanced Keyboard
- CS-609G **GREEN** Mini-Vertical Case w/230Watt **GREEN** P.S.

Canon

Quality Ink Jet Printers

BJ-200E Laser Quality Output & 248CPS At a Great Price.

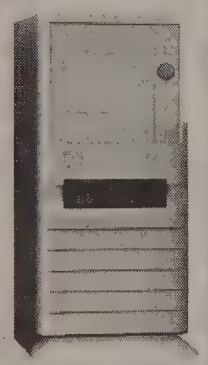
$289

BJC-600 Laser Quality Output + Full Color Printing. One of The Markets Hottest Sellers.

$569

Intel Pentium 60Mhz PCI Bus

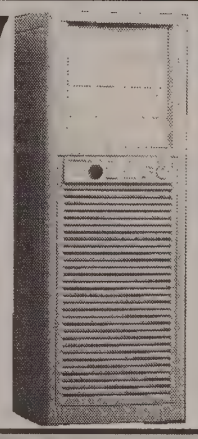
$2629



- Intel Pentium PCI Mbd & Intel Pentium 60Mhz CPU w/256K Cache
- **8Mb RAM, 540Mb HDD** w/PCI Controller
- TEAC 1.2Mb & 1.44Mb Floppy Drives
- 2 Ser./1 Par./1 Game
- **Diamond Viper PCI Graphics Accelerator (Super Fast! Over 80 Million Winmarks)**
- CS-230 Mid-Vertical Case w/250W. P.S. & Two Super Cooling Fans
- 101 Key Enhanced Keyboard

ESSENCE Pentium VLB/PCI

Pentium-66Mhz .. $ 3519
Pentium-60Mhz .. $3429



- Opti Pentium VLB/PCI Mbd & Intel Pentium CPU w/512K Cache
- **8Mb RAM, 1.08Gb HDD** w/Adaptec 2842 VLB SCSI Controller
- TEAC 1.2Mb & 1.44Mb Floppy Drives
- **Diamond Viper VLB Graphics Accelerator (Fastest 2Mb VLB Card on the Market)**
- CS-300GTS Full-Vertical Case w/300W. P.S. & Two Super Cooling Fans
- 101 Key Enhanced Keyboard

ATI TECHNOLOGIES INC.

$139 Graphics Wonder

SVGA Accelerator

Features: 1Mb Dram, True 24-Bit Color, Ultra Fast Mach 32 Accelerator Chip, Up to 1280 x 1024 Res., All For Only $139. After ATI's $10. Mail-In Rebate.

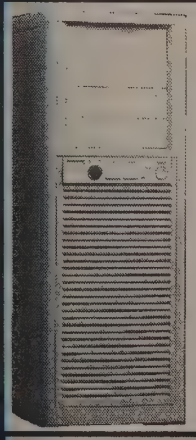
Smart One

14,400bps Internal Fax/Modem

$89

Smart One Internal 14400bd Fax & 14400bd Modem Features v.32bis, v.42bis, MNP Error Correction

MICRONICS COMPUTERS INC.

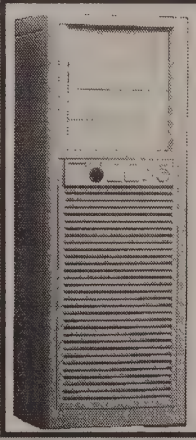


Pentium 60 PCI $3529

- Micronics Pentium PCI Mbd & Intel Pentium 60Mhz CPU w/256K Cache
- **8Mb RAM, 540Mb FAST SCSI-2 HDD w/ QLogic PCI SCSI-2 Controller**
- TEAC 1.2Mb & 1.44Mb Floppy Drives
- **Diamond Viper PCI Graphics Accelerator (Super Fast! Over 80 Million Winmarks)**
- CS-300 Full-Vertical Case w/300W. P.S. & Two Super Cooling Fans
- 101 Key Enhanced Keyboard

American Megatrends

Pentium 60 PCI $3729



- AMI Pentium PCI Mbd & Intel Pentium 60Mhz CPU w/256K Cache
- **8Mb RAM, 540Mb FAST SCSI-2 HDD w/ QLogic PCI SCSI-2 Controller**
- TEAC 1.2Mb & 1.44Mb Floppy Drives
- **Diamond Viper PCI Graphics Accelerator (Super Fast! Over 80 Million Winmarks)**
- CS-300 Full-Vertical Case w/300W. P.S. & Two Super Cooling Fans
- 101 Key Enhanced Keyboard

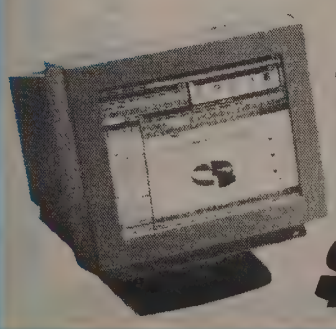
WESTERN DIGITAL

HDD Blowout

420Mb IDE .. $289
540Mb IDE . $389

Both Caviar Drives Have Onboard Cache & Fast 13ms Access Times **While Supplies Last**

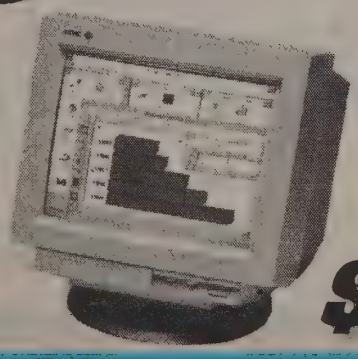
MITAC Hi-Resolution Monitors



M1450PD 14" SVGA NI

1024x768 Max. Resolution, Non-Interlaced, Digital On-Screen Programming, Power Saving **Green** Monitor

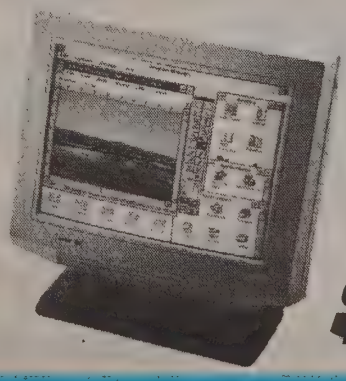
$248



L1564PD 15" SVGA NI

1280x1024 Max. Resolution, 76Hz Non-Interlaced, Digital On-Screen Programming, Power Saving**Green**Monitor w/ MPR-II Low Radiation

$375



L1782 17" SVGA NI

1600x1280 Max. Resolution, 76Hz Non-Interlaced, Digital On-Screen Programming, Power Saving**Green**Monitor w/ MPR-II Low Radiation

$698

Excellent Service ! Comfortable Showrooms ! One on One Customer Service ! Best Possible Price ! Quality Name Brands !

Monitors

AMDEK 432N 14" MonoVGA (Amber/White) **$125**

ACER

34T 14" SVGA NI (1024x768,.28dp) **$265**
56L 15" SVGA NI FST (1024x768,.28dp) **$369**
76i 17" SVGA NI FST(1280x1024,.28dp) **$689**

CTX

5439A 14" SVGA (1024x768,.39dp) **$210**
5468ES 14" SVGA (1024x768,.28dp) **$245**
1451 14" Full -Screen NI (1024x768,.28dp) .. **$262**
1461LR 14" NI (1024x768, 72Hz refresh) **$289**
1560LR 15" Digital NI (1024x768,.28dp) **$368**
1760DF 17" Digital NI (1280x1024,.28dp) **$645**
1760LR 17" Digital NI (1280x1024,.28dp) **$675**

Infinity

IT1400VG 14" Mono VGA (Paper White) **$99**
IE1439SV 14" SVGA (1024x768,.39dp) **$195**
IK1439SV 14" Full SVGA (1024x768,.39dp) .. **$205**
IE1428SV 14" SVGA (1024x768,.28dp) **$230**
IK1428SV 14" Full SVGA (1024x768,.28dp) .. **$239**
IE1428N4 14" Full SVGA NI (1024x768,.28dp) . **$245**
IK1428N4 14" Full SVGA NI (1024x768,.28dp) . **$255**
IS1528N5 15" FST SVGA NI (1024x768,.28dp) . **$325**
IK1528DN6 15" Digital FST (1280x1024,.28dp) **$385**
IE1728D6 17" FST SVGA NI (1280x1024,.28) **$625**
IK1726DN7 17" Digital FST (1600x1200,.26dp) **$685**

Digiview

HR-1401 14" SVGA (1024x768,.39dp) **$189**
HR-1428 14" SVGA (1024x768,.28dp) **$213**
HR-1431 14" SVGA NI (1024x768,.28dp) **$239**

MAG

LX-1450 14" SVGA NI (1024x768,.28dp) **$289**
LX-1564 15" SVGA NI (1280x1024,.28dp) **$369**
MX-15F 15" Digital NI (1280x1024,.28dp) **$449**
MX-17F 17" Digital NI (1280x1024,.28dp) **$849**
DX-15F 15" Green FST (1280x1024,.28dp) ... **$429**
DX-17F 17" Green FST (1280x1024,.28dp) ... **$729**

NEC

3V 15" Multi-Freq **Green EPA** (.28dp) **$495**
3FGe 15" Color Monitor (1024x768,.28dp) **$595**
4FGe 15" Multi-Freq (1024x768,.28dp) **$655**
5FGe 17" Multi-Freq (1024x768,.28dp) **$1045**
MultiSync 5FGP 17" (1280x1024,.28dp) **$1175**
MultiSync 6FGP 21" (1280x1024,.28dp) **$2125**

OPTIQUEST

800S 14" VGA (640x480,.39dp) **$199**
900S 14" SuperVGA (1024x768,.28dp) **$249**
1000S 14" SVGA NI (1024x768,.28dp) **$265**
1500D 14" Digital NI (1024x768,.28dp) **$339**
2000DX 15" Digital NI (1280x1024,.28dp) ... **$375**
2000DS 15" Digital NI (1280x1024,.28dp) ... **$389**
2000DC 15" Digital NI (1280x1024,.28dp) ... **$415**
4000DS 17" Digital NI (1280x1024,.28dp) .. **$685**
4000DC 17" Digital NI (1280x1024,.28dp) .. **$765**

NOKIA
CONSUMER ELECTRONICS

44BS 14" Green SVGA NI (1024x768,.28dp) **$425**
449E 15" Green SVGA NI (1024x768,.28dp) **$545**
447B 17" Green SVGA NI (1280x1024,.26dp) . **$1025**
445M 21" Green SVGA NI (1280x1024,.26dp) **$2075**

ViewSonic

4E 14" SuperVGA (1024x768,.28dp) **$269**
6E 14" SuperVGA NI (1024x768,.28dp) **$285**
7E 17" SuperVGA NI (1024x768,.28dp) **$729**
14E 14" SuperVGA NI (1024x768,70Hz,.28dp) **$325**
15E 15" Flat Screen (.28dp,76Hz refresh) **$375**
15 15" Digital Multi-Freq (.28dp,1280x1024) **$449**
17G 17" Digital Multi-Freq (.28dp,1280x1024) **$799**
17 17" Digital Multi-Freq (.28dp,1600x1280) **$949**
20 20" Digital Multi-Freq (.28dp,1600x1280) **$1489**
21 21" Digital Multi-Freq (.28dp,1600x1280) **$1729**

Sceptre

CM-4Y 14" SVGA (.39dp,1024x768) **$209**
CM-6Y 14" SVGA (.28dp,1024x768) **$239**
CE-6N 14" Digital FST NI (.28dp,1024x768) **$275**
CE-61N 14" NI (.28dp,1024x768) **$250**
CC-6N 14" NI Digital (.28dp, 1280x1024) **$309**
CC-615 15" Flat Screen (.28dp,1280x1024) **$335**
CC-615GL 15" Green FST (.28dp,1280x1024) **$399**
CC-617 17" Flat Screen (.26dp,1280x1024) **$699**
CC-617L 17" FST Low Rad. (.26dp,1280x1024) .. **$749**

MITAC

A1437 14" SVGA (.39dp,1024x768) **$205**
A1438 14" SVGA (.28dp,1024x768) **$225**
M1450PD 14" NI, Digital (.28dp,1024x768) **$248**
A1548T 15" NI FST (.28dp,1024x768) **$318**
A1775 17" NI FST (.28dp,1280x1024) **$665**
L1564PD 15" NI Digital FST (.28dp,1280x1024) . **$375**
L1782 17" NI Digital FST (.26dp,1600x1200) **$698**
L2182 21" NI Digital FST (.25dp,1600x1200) ... **$1695**

SONY

Sony CPD-1320UC2 14" SVGA NI FST **$379**
Sony GDM-17SE1 17" SVGA NI FST **$1229**
Sony DGM-2038 20" SVGA NI FST **$2299**
*** Please call for prices on GoldStar, Hitachi, Hyundai, Mitsubishi, Panasonic, Philips/Magnavox, SamSung, Sigma Designs, & SuperMac Monitors*

Video Cards

Mono/Graphics/Printer Card **$14**
AVGA-1 VGA Card w/256K **$30**
AVGA-3 (CL GD5422) 1MB Accelerator (16.7mil color) . **$68**
Cirrus Logic GD5424 VLB Accelerator w/1MB **$82**
Cirrus Logic GD5426 VLB Accelerator w/1MB **$88**
Cirrus Logic GD5428 VLB Accelerator w/1MB **$90**
TVGA-9000 VGA w/256K (up to 512K) **$32**
TVGA-8900D 1MB SuperVGA Card (2x faster than) **$64**
TVGA-9200 VESA VLB 1Mb Accelerator Card **$75**
TVGA-9400 VESA VLB 1Mb Accelerator Card **$82**
WD-90C33 **VLB Accelerator** w/1MB **$93**
Paradise VLB Plus **Accelerator** w/1MB **$130**
Tseng Lab W32i **VLB** 1Mb Accelerator Card **$140**
Tseng Lab W32p **PCI** 2Mb Accelerator Card **$195**

ATi

Graphics Wonder ISA w/1Mb **$160**
Graphics Wonder VLB w/1Mb **$160**
Graphics Ultra Plus ISA w/1Mb **$165**
Graphics Ultra Plus VLB w/1Mb **$165**
Graphics Ultra Pro ISA w/2Mb **$339**
Graphics Ultra Pro VLB w/2Mb **$339**
Graphics Ultra Pro PCI w/1Mb **$310**
Graphics Pro Turbo w/2Mb ISA/VLB/PCI ..... **$CALL**

DIAMOND

SpeedStar Pro Graphics Accelerator w/1MB **$110**
SpeedStar Pro VLB Accelerator w/1MB **$110**
Stealth-24 ISA Windows Accelerator w/1MB **$168**
Stealth-24 VLB Windows Accelerator w/1MB **$150**
Stealth Pro VLB Graphics Accelerator w/1MB **$260**
** *2Mb Upgrade for Stealth Pro* ..... **+$75**
Viper VLB Graphics Accelerator w/2MB VRam **$360**
BRAND NEW!! Stealth 32 PCI w/2MB **$255**
BRAND NEW !! VIPER *PCI w/2Mb VRAM* **$390**

ORCHID

Fahrenheit **VLB Windows Accelerator** w/1MB ... **$145**
BRAND NEW!! Orchid KELVIN 64 VLB 1Mb ... **$175**
BRAND NEW!! Orchid KELVIN 64 PCI 1Mb ... **$195**
** *2Mb Upgrade for Fahrenheit VLB & Kelvin +$55.*

Hercules

Hercules Dynamite Pro ISA w/1Mb **$180**
Hercules Dynamite Pro VLB w/1Mb **$180**
Hercules Dynamite Pro ISA w/2Mb **$220**
Hercules Dynamite Pro VLBw/2Mb **$220**
Hercules Dynamite Pro PCI w/2Mb **$255**
Hercules Graphite Pro ISA w/1Mb **$275**
Hercules Graphite Pro VLB w/1Mb **$275**
Hercules Graphite Pro ISA w/2Mb **$400**
Hercules Graphite Pro VLB w/2Mb **$400**
** *Please call for prices of Boca, Cardinal, Micronics, Sigma Designs, STB, & SuperMac Video Cards.*

Drives

TEAC 1.2MB FDD (5.25") **$52**
TEAC 1.44MB FDD (3.5") **$40**
TEAC 2-in-1 1.2/1.44MB FDD **$113**
Mitsumi 1.2MB FDD (5.25") **$44**
Mitsumi 1.44MB FDD (3.5") **$33**

CONNER
The Storage Answer.

CFA170A 170MB IDE HDD (17ms) **$205**
CFS-210A 210MB IDE HDD (14ms,) **$222**
CP-30254H 250MB IDE HDD (14ms) **$245**
CFA340A 340MB IDE HDD (14ms) **$278**
CFS420A 420MB IDE HDD (14ms) **$295**
CFA540A 540MB IDE HDD (12ms,256K cache) ... **$395**
CP-30170 170MB SCSI HDD (17ms) **$230**
CFP1060 1.06Gb Fast SCSI-2 HDD (9ms) **$820**

FUJITSU

M2642T 520MB IDE HDD (12ms, 5yr warranty) ... **$530**
M2624FA 520MB SCSI HDD (12ms, 5yr wrnty) **$535**
M2691ESA 650Mb SCSI HDD (10.5ms,5yr wrnty) **$680**
M2624ESA 1.05GB SCSI HDD (12ms, 5yr wrnty) . **$820**
M2654SA 2.1GB SCSI HDD (10.5ms,5yr wrnty) . **$1470**

Maxtor

Maxtor MX-7171 170Mb IDE HDD (17Ms) **$205**
Maxtor MX-7245A 245Mb IDE HDD (14ms) **$248**
Maxtor MX-7345A 345Mb IDE HDD (14ms) **$285**
Maxtor MXT-540A 540Mb IDE HDD (8.5ms) **$425**
Maxtor MX-245S 245Mb SCSI HDD (14ms) **$275**
Maxtor MX-7290S 290Mb SCSI HDD (14ms) ... **$295**
Maxtor MX-345S 345Mb SCSI HDD (14ms) **$365**
Maxtor MXT-540S 540Mb SCSI HDD (8.5ms) ... **$590**
Maxtor MXT-1240S 1.24Gb SCSI HDD **$1080**
Maxtor MXL-105 105Mb PCMCIA Type III **$545**

Quantum™

ProDrive ELS 170MB IDE HDD (17ms, 2yr wrnty) . **$205**
ProDrive LPS 270MB IDE HDD (13ms, 128K) **$255**
ProDrive LPS 340MB IDE HDD (13ms, 128K) **$290**
ProDrive LPS 540MB IDE HDD (13ms, 128K) **$435**
ProDrive LPS 340Mb SCSI2 HDD (13ms,128K) ... **$325**
ProDrive LPS 540Mb SCSI2 HDD (13ms,128K) ... **$455**
ProDrive 1080S 1080MB SCSI-2 HDD (5yr wrnty) . **$810**
ProDrive 1225S 1225MB SCSI-2 HDD (5yr wrnty) **$955**
ProDrive 1800S 1.8GB SCSI-2 HDD (5ry wrnty) **$1080**

WESTERN DIGITAL

Western Digital AC1210 210MB IDE HDD (13ms) . **$218**
Western Digital AC2250 250MB IDE HDD (13ms) . **$245**
Western Digital AC2340 340MB IDE HDD (13ms) . **$285**
Western Digital AC2420 420MB IDE HDD (13ms) . **$300**
Brand New! WD AC2540 540Mb IDE HDD **$415**

*** *Please call for Digital (DEC), Hewlett-Packard, IBM, Micropolis, Mini-Stor, Seagate & Storage D.*

SyQuest

SQ5110C 88MB SCSI Removable Disk Drive **$320**
SQ3105 105MB SCSI Removable Disk Drive (3.5") **$425**
Mitac 105MB IDE Int. Removable Disk Kit **$320**
Mitac 105MB IDE EXT. Removable Disk Kit **$430**
SQ3105 105MB IDE Int. Removable Disk Kit **$350**
SQ3105 105MB Ext. IDE Removable Disk Drive **$430**
SQ400 44MB Cartridge **$75**
SyQuest SQ800 88MB Cartridge **$108**
SyQuest SQ310 105MB 3.5" Cartridge **$72**

Controllers

High Speed AT I/O (2 Ser. 1 Par.) 16c550 Clone ... **$35**
AT Super IDE IO Adapter (Fdd/Hdd, 2S, 1P, 1G) **$16**
VESA Local Bus Super IDE & IO (2S,1P,1G) **$28**
PCI Local Bus Super IDE Adapter **$35**
BOCA I/O - 4 Serial & 2 Parallel ports **$95**
Game (Joystick Port) Card **$12**
Parallel Printer Card **$12**
GSI-11V **2.88M** Four **(4)** Floppy Controller/Cable ... **$55**
GSI-18V **Co-resident IDE** Controller **$42**
GSI-21V **2.88M** Four **(4)** Fdd & IDE Adapter **$62**
GSI-32V **2.88M** Four **(4)** Fdd & IDE & I/O **$115**

Promise

DC-200 ISA IDE Caching (0K, upto 16MB) **$110**
DC-4020 ISA SCSI Caching (0K, upto 16MB) **$265**
DC-4030VL VLB IDE Caching (0K, upto 16MB) **$145**
DC-420 VLB IDE Caching (512K, upto 1MB) **$110**

Tekram

Tekram DC-600 ISA IDE Caching (up to 16MB) **$108**
Tekram DC-680 VLB IDE Caching (up to 16MB) **$140**
Tekram DC-690 PCI IDE Caching (up to 16MB) **$200**
Tekram DC-820 EISA SCSI Caching (up to 16MB) . **$390**
Tekram DC-880 VLB SCSI Caching (up to 16MB) .. **$375**

Bus Logic

Bus Logic KT410A VLB IDE Caching (up to 16MB) ... **$145**
Bus Logic KT510A ISA IDE Caching (up to 16MB) ... **$110**
Bus Logic KT545S ISA Fast SCSI-2 Controller **$235**
Bus Logic KT445S VLB Fast SCSI-2 Controller **$275**
Bus Logic KT747S EISA Fast SCSI-2 Controller **$355**

DTC

DTC-2280 ISA IDE HDD/FDD & IO **$19**
DTC-2278 VLB IDE HDD/FDD & IO **$36**
DTC-2290 EISA IDE HDD/FDD Adapter **$148**
DTC-3270 VLB SCSI HDD Adapter **$130**
DTC-3290SE EISA SCSI Caching Adapter **$475**

Future Domain

TMC-1670SVP ISA SCSI Adapter Kit **$145**
TMC-1680SVP ISA Adapter Kit **$145**
TMC-7000EXSVP EISA BusMaster SCSI Adapter .. **$395**

Adaptec

Trantor T130 8-Bit SCSI Adapter (hdd/CDrom) ... **$CALL**
Trantor T338 Parallel to SCSI Adapter **$65**
Trantor T358 Parallel to SCSI Adapter **$105**
AHA-1522 ISA SCSI Adapter (Card Only) **$89**
AHA-1542C ISA SCSI Adapter (Card Only) **$190**
AHA-2742 EISA SCSI Adapter (Card Only) **$295**
AHA-1522K ISA SCSI Adapter Kit **$148**
AHA-1542CK ISA SCSI Kit- Bus Mastering **$257**
AHA-2742TK EISA SCSI Kit - Bus Mastering **$370**
AHA-2842VLK VLB SCSI Kit - Bus Mastering **$305**

Q-Logic

QLogic Fast-SCSI **ISA** HDD Adapter **$139**
QLogic FAST-SCSI **ISA** HDD/FDD Adapter **$149**
QLogic Fast-SCSI **VLB** HDD Adapter **$199**
QLogic FAST-SCSI **VLB** HDD/FDD Adapter **$209**
QLogic FAST-SCSI **EISA** HDD/FDD Adapter **$219**
QLogic FAST-SCSI **EISA** HDD/FDD Adapter ... **$229**
QLogic Fast-SCSI **PCMCIA** HDD Adapter **$199**
QLogic Fast-SCSI **PCI** HDD Adapter **$319**

Wonder

VL-2018 IDE 2HD/4FD/2S(16550)/1P/2.88 ..... **$59**
S-IFSP2 IDE 2HD/4FD/3S(2-16550)/2P/1G **$59**
FAST-PIG IDE 2HD/4FD/2S (16550)/1p/2.88 ..... **$49**

Please call for prices on Allways Technologies, AMI, DPT, & Micronics

ESSENCE

ESSENCE GROUP

2% Cash Discount

Fountain Valley
Order Hotline
(714) 546-3110
FAX (714) 546-3803
17815 Newhope St. #G
Fountain Valley, CA 92708

IRVINE
Order Hotline
(714) 580-6990
FAX (714) 580-6996
6 Morgan St. Suite #130
Irvine, CA 92718

Store Hours:
M-F 9am-6pm
Sat 10am-5pm

SuperStore Pricing ! | No Pressure Tactics ! | We Cater To Corporate Accounts ! | PO's Accepted !

Growing Strong After 5 Years in Business ! | Dealers welcome ! | Best Possible Price !

Multi-Media Systems

Harmony IIIC Multimedia Power Kit **$299**
- Mitsumi FX-001D Int. Double Speed CD-ROM 250ms
- Harmony 16Bit Stereo Sound Card, Pair of Speakers
- 5 CD titles - Reference Library, US Atlas, World Atlas, Mavis Beacon's Typing, & Chessmaster 3000

Harmony IIIB Multimedia Power Kit **$369**
- Mitsumi FX-001D Int. Double Speed CD-ROM 250ms
- Sound Blaster 16MCD Stereo Sound Card w/Speakers
- 6 CD titles - MPC Encyclopedia, US Atlas, World Atlas, Mavis Beacon's Typing, & Chessmaster 3000, Return to Zork

Harmony IIIA Multimedia Kit **$399**
- Panasonic CR-562B Internal Double-spin, Multi-session CD-ROM - 320ms, 300kb/s Data transfer rate
- Sound Blaster 16 Stereo Sound Card, w/Speakers
- 7 CD titles - MPC Encyclopedia, US Atlas, World Atlas, King's Quest V, Mixed Up Mother Goose, Tempra Photo CD, & Sherlock Holmes Consulting Detective

Harmony IV Multimedia Power Kit **$615**
- Toshiba 3401B Int. SCSI CD-ROM 320k, 200ms,
- Sound Blaster 16 SCSI-2 16Bit Stereo Sound Card
- 7 CD titles - MPC Encyclopedia, US Atlas, World Atlas, Secret Weapons of the Luftwaffe, Loom, Tempra Photo CD, Reference Library

Harmony IVA Multimedia Power Kit **$645**
- NEC 3XI Internal 3X Speed CD-ROM (195ms,450K)
- Sound Blaster 16 SCSI-2 16Bit Stereo Sound Card
- 7 CD titles - MPC Encyclopedia, US Atlas, World Atlas, Return To Zork, Loom, Kodak Photo CD, Reference Library

MITAC

Mitac Multimedia Deluxe Upgrade Kit **$365**
- Mitsumi Internal FX001D CD-ROM (250ms, Kodak Photo CD compatible, Double Speed 300k Transfer)
- Sound Galaxy 16 DSP PRO Sound Card w/Speakers
- Software bundled: Compton's Multimedia Encyclopedia for Windows, The KGB/CIA World Factbook, Dictionary of the Living World, Mayo Clinic, Dinosaurs

CREATIVE
CREATIVE LABS, INC.

Discovery CD 16 Upgrade Kit (Internal) **$329**
- **Sound Blaster 16** Stereo Sound Card
- Creative Labs Internal CD-ROM (Panasonics CD-ROM), 64KB Buffer, 300KB/sec Data Transfer, 320ms Access rate, Photo CD compatible
- A pairs of Stereo Speakers
- Software bundled: Multimedia Encyclopedia, The .. Animals!, Aldus PhotoStyler SE, Just Grandma & Me, Where in the World is Carmen Sandiego - Deluxe

Sony / Sound Blaster 16 Bundle **$279**
- **SONY CDU-33A 2X** Internal CD-ROM (300k,280ms)
- **Sound Blaster 16** Stereo Sound Card

Sony / Spectrum Bundle **$279**
- **Sony 33A 2X** Internal SCSI CD-ROM (300Kb/s, 320ms)
- **Media Vision Pro Audio Spectrum 16** Stereo Sound Card

Panasonic CR-563/SoundBlaster 16 Bundle **$285**
- **Panasonic CR-563 2X** Int. CD-ROM (320ms,300k)
- **Sound Blaster 16** Stereo Sound Card
- **Includes Two Games**

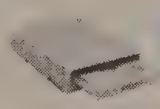
Mitsumi / Mozart 16 Bundle **$255**
- **Mitsumi FX001 2X** CD-Rom (300Kb/s, 250ms)
- **Mozart 16** 16-Bit Stereo Sound Card

NEC CDR-210 / Spectrum 16 Bundle **$279**
- **NEC CDR-210 2X** SCSI (300Kb/s, 280ms)
- **Pro-Audio Spectrum 16** Stereo Sound Card

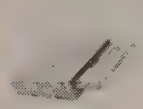
NEC CDR-510 / Spectrum 16 Bundle **$489**
- **NEC CDR-510 3X** SCSI (300Kb/s, 280ms)
- **Pro-Audio Spectrum 16** Stereo Sound Card

Toshiba / Spectrum Bundle **$309**
- **Toshiba 4101 Int. 2X** SCSI CD-ROM (300Kb/s, 320ms)
- **Pro-Audio Spectrum 16** Stereo Sound Card

Toshiba / Spectrum Bundle **$439**
- **Toshiba 3401B Int. 2X** SCSI CD-ROM (300Kb/s, 200ms)
- **Pro-Audio Spectrum 16** Stereo Sound Card



CD-ROMs



Mitsumi

Mitsumi FX001D Int. CD-ROM (Double Speed,250ms) **$157**
Mitsumi FX001D Int. CD-ROM with Interface **$165**

NEC

NEC CDR-210 Int. OEM SCSI CD-ROM (320ms,300k,) .. **$168**
NEC CDR-510 Int. 3X Speed CD-ROM (195ms,450K) ... **$375**
NEC CDR-400 3Xp Portable 3X Speed CD-ROM **$480**
NEC CDR-500 3Xi Internal 3X Speed CD-ROM **$515**
NEC CDR-6003Xe External 3X Speed CD-ROM **$605**
NEC CDR-900 4Xe External 4X Speed CD-ROM **$985**

Panasonic
Office Automation

Panasonic CR-562 Int. 2X CD-ROM (320ms,300kb/s) .. **$157**
Panasonic CR-5632Int. 2X CD-ROM w/ Interface **$169**

SONY

SONY CDU-33A Internal 2X CD-ROM (300k,280ms) **$159**
SONY CDU-33A Internal 2X CD-ROM w/Interface **$170**

TOSHIBA

Toshiba 4101B Int. SCSI CD-ROM 320k, 275ms **$199**
Toshiba 3401B Int. SCSI CD-ROM 320k, 200ms **$329**
Toshiba 3401E Ext. SCSI CD-ROM 320K, 200ms **$495**
Toshiba 3401P Portable SCSI CD-ROM **$580**

Plextor (Texel)

Plextor (TEXEL) 3028 Int. 2X SCSI CD-ROM 240ms **$309**
Plextor (TEXEL) 5028 Ext. 2X SCSI CD-ROM 240ms **$415**

Sound Cards

CREATIVE
CREATIVE LABS, INC.

Creative Lab Sound Blaster Deluxe **$68**
Creative Lab Sound Blaster Pro Deluxe **$89**
Creative Lab Sound Blaster 16 Basic **$118**
Creative Lab Sound Blaster 16 MCD **$168**
Creative Lab Sound Blaster 16 MCD ASP **$188**
Creative Lab Sound Blaster 16 SCSI II **$188**
Creative Lab Sound Blaster 16 SCSI II ASP **$208**
Creative Lab ASP Upgrade **$65**
Creative Lab Voice Assist w/Mic **$65**
Creative Lab MIDI Kit **$75**
Creative Lab Video Spigot for Windows **$279**
Creative Lab Video Blaster SE **$269**
Creative Lab WaveBlaster Daughter Board **$199**

MEDIA VISION

Media Vision Pro Audio Spectrum 16 Basic **$89**
Media Vision Pro Audio Spectrum 16 Sound Card **$109**
Media Vision Pro Audio Studio 16 Sound Card **$139**
Media Vision Pro Movie Spectrum Video Capture card **$199**

ORCHID

Orchid GameWave 32 DSP Sound Card **$135**
Orchid SoundWave 32 WaveTable Sound Card **$189**

***** Please call for prices on ATI, Aztech Labs, Cardinal, Diamond, Logitech, Roland, Sigma Designs, & Turtle Beach Sound Products***

Speakers & Accessories

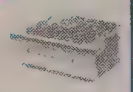
Labtec.

AM-22 Deluxe Microphone **$13.95**
C-10 Computer Stereo Headphone **$14.95**
CS-150 Shielded Amplified Stereo Speakers **$19.50**
CS-180 Shielded Amplified Stereo Speakers **$18.50**
CS-550 Shielded Amplified Stereo Speakers **$27.50**
SS-700 Shielded Amplified Stereo Speakers w/3 Band EQ **$32.50**
CS-800 Shielded Amplified Stereo Speakers w/AC Adapter **$38.50**
CS-900 Shielded Amplified Stereo Speakers w/AC Adapter .. **$65.50**
SS-1000 Shielded Amplified Stereo Speakers ... **$88.00**
AD-4 400mA AC Adapter (for Speakers System) ... **$9.95**

Jazz-Hipster

Jazz Hipster J-007W 3Watt Per Channel **$9.95**
Jazz Hipster J-307A-W 5Watt Per Channel **$39.95**
Jazz Hipster J-310AV-W 5Watt Per Channel **$44.95**
Jazz Hipster J-312AV-W 5Watt Per Channel **$49.95**
Jazz Hipster J-320AV-W 5Watt Per Channel **$59.95**
Jazz Hipster J-351AV-W 5Watt Per Channel **$54.95**
Jazz Hipster J-510AV-W 14Watt Per Channel **$64.95**
Jazz Hipster J-511AV-W 14Watt Per Channel **$66.95**
Jazz Hipster J-520AV-W 14Watt Per Channel **$89.95**
Jazz Hipster J-530AV-W 14Watt Per Channel **$69.95**
Jazz Hipster J-590AV-W 14Watt Per Channel **$74.95**
Jazz Hipster J-700AV-W 5Watt Per Channel **$74.95**
Jazz Hipster J-702AV-B 14Watt Per Channel **$114.95**
Jazz Hipster J-818AV-B 14Watt Per Channel **$154.95**

Tape Backups



CONNER
The Storage Answer.

Conner TapeStor 250MB Tape Backup w/One Pre-formatted Cartridge **$165**
Conner TapeStor 250MB **External Parallel Port** Tape Backup w/One Pre-formatted Cartridge **$325**

COLORADO MEMORY SYSTEMS INC.

Colorado JT-10 120MB **Parallel Port** External **$220**
Colorado JT-20 250MB **Parallel Port** External **$345**
Colorado DJ-10 120MB Internal Tape Backup **$109**
Colorado DJ-20 250MB Internal Tape Backup **$179**
Colorado AB-11 External Adapter Kit **$30**
Colorado KE-09 External Drive Kit **$68**
Colorado FC-10 500Kb/s-1Mb/s Adapter Kit **$69**
Colorado TC-15 Data Compression Adapter Kit **$149**
Colorado Int. Power Tape 1.0GB Tape Backup **$650**
Colorado Int. Power Tape 2.0GB Tape Backup **$955**
Colorado Int. Power Tape 4.0GB Tape Backup **$1195**
Colorado Ext. Power Tape 2.0GB Tape Backup ... **$1095**
Colorado Ext. Power Tape 4.0GB Tape Backup ... **$1425**
Colorado PowerDAT 6000 Internal 2.0GB TB **$1120**
Colorado PowerDAT 6000 External 2.0GB TB **$1350**

Plextor (Texel)

IOMega Tape-250 Internal 250Mb Tape Backup ... **$179**
IOMega Tape-250External 250Mb Parallel TB **$345**

***** Call for prices on DEC, Emerald Systems, Exabyte, Helett-Packard, IOMega, Mountain, Summit, Tecmar, Wangtek & WangDAT Tape Backup Systems***

ESSENCE GROUP NOW ACCEPTS THE DISCOVER CARD & OFFERS OUR CLIENTS PERSONALIZED ESSENCE CHARGE CARDS... SO GIVE US A CALL TODAY!

Excellent Service ! Comfortable Showrooms ! One on One Customer Service ! Best Possible Price ! Quality Name Brands !

System Boards

SYSTEM BOARDS (w/CPU, 0K Memory) - INTEL

Intel Pentium **PCI** 60Mhz M/B w/256K (w/CPU) **$975**
Intel Pentium **PCI** 60Mhz M/B w/256K (w/o CPU) **$305**

SYSTEM BOARDS (w/CPU, 0K Memory) - AMI

AMI Pentium **PCI** 60Mhz w/256K **$1855**
AMI **VLB** 60Mhz M/B w/256K **$1795**
AMI 486DX2-66 **PCI** M/B w/256K **$1015**
AMI 486DX-33 **PCI** M/B w/256K **$790**
AMI Enterprise IV 486DX2-66MHz **EVLB** M/B w/256K **$985**
AMI Enterprise IV 486DX-50MHz **EVLB** M/B w/256K **$930**
AMI Enterprise IV 486DX-33MHz **EVLB** M/B w/256K **$760**
AMI Super Voyager II 486DX2-66MHz **VLB** M/B w/256K **$860**
AMI Super Voyager II 486DX-50MHz **VLB** M/B w/256K **$805**
AMI Super Voyager II 486DX-33MHz **VLB** M/B w/256K **$630**
AMI Super Voyager II 486SX-33MHz **VLB** M/B w/64K **$420**
AMI Super Voyager II 486SX-25MHz **VLB** M/B w/64K **$375**

SYSTEM BOARDS (w/CPU, 0K Memory) - MICRONICS

Micronics Pentium **PCI** 60Mhz M/B w/256K **$1065**
Micronics M4P 486DX2-66 M/B w/256K **$995**
Micronics M4P 486DX2-50 M/B w/256K **$735**
Micronics M4P 486DX-33 M/B w/256K **$715**
Micronics M4P 486SX-33 M/B w/256K **$535**
Micronics E3 486DX2-66MHz M/B w/256K **$1005**
Micronics E3 486DX-50MHz M/B w/256K **$875**
Micronics E3 486DX2-50MHz M/B w/256K **$810**
Micronics E3 486DX-33MHz M/B w/256K **$745**
Micronics MX 30 486DX2-66MHz **VLB** M/B w/256K **$890**
Micronics MX-30 486DX2-50MHz **VLB** M/B w/256K **$690**
Micronics MX-30 486SX-33MHz **VLB** M/B w/128K **$430**
Micronics MX-30 486SX-33MHz **VLB** M/B w/0K **$403**
Micronics MX-30 486SX-25MHz **VLB** M/B w/0K **$300**
Micronics Mini 486DX2-66MHz **ISA** M/B w/256K **$870**
Micronics Mini 486DX-50MHz **ISA** M/B w/256K **$840**
Micronics Mini 486DX2-50MHz **ISA** M/B w/256K **$670**
Micronics Mini 486DX-33MHz **ISA** M/B w/256K **$608**
Micronics Mini 486DX-33MHz **ISA** M/B w/128K **$590**
Micronics Mini 486SX-33MHz **ISA** M/B w/128K **$417**
Micronics Mini 486SX-33MHz **ISA** M/B w/0K **$383**

SYSTEM BOARDS (w/CPU, 0K Memory) - IBM (Alaris)

IBM Path-411 486SLC2-66 **VLB** M/B w/128K & Math-Co **$284**
IBM Leopard 486SLC2-66 **VLB** M/B w/64K **$245**
**Manufactured in the U.S.A. by IBM Charlott, NC, w/ 3yr limited warranty*
**128K Cache Upgrade from 64K +$15., Math-Co Upgrade +$45.*

SYSTEM BOARDS (w/o CPU, 0K Memory) - VEGA

VEGA 486DX PCI VLB M/B w/256 Cache (3VLB) **$305**
VEGA 486 EISA VLB M/B w/256K **$305**
VEGA 486S VLB M/B w/256K (3VLB) **$175**
VEGA 486V VLB M/B w/256K Cache (VIA) - 72 pin **$180**

SYSTEM BOARDS (w/o CPU, 0K Memory) - AIR

AIR Pentum **EISA PCI** M/B w/256K & SCSI IO **$785**
AIR Pentum **VLB** M/B w/256K **$475**
AIR 486 **EISA VLB** M/B w/256 Cache (72 pin) **$360**
AIR 486 **EISA VLB** M/B w/256 Cache (30 pin) **$365**
AIR 486 **VLB** w/256K & SCSI-2, IDE /IO (72 pin) **$345**
AIR 486 **VLB** M/B w/256K & IDE/IO (72 pin) **$210**
AIR 486 **VLB** M/B w/256K Cache **$188**

SYSTEM BOARDS (w/o CPU, 0K Memory) - OPTI

OPTi Pentum 60/66MHz **PCI VLB** M/B **w/512K** **$425**
OPTi 486 **EISA VLB** M/B w/256K Cache (72 pin) **$225**
OPTi Mini 486 **VLB** M/B w/256K Cache (Bus Master mode) w/ZIF .. **$119**
OPTi Mini 486 **VLB** M/B w/256K Cache (Bus Master mode) **$112**
OPTi Mini 486 **VLB** M/B w/256K Cache (Slave mode) **$99**
OPTi Mini 486 **DLC** M/B w/128K Cache **$84**
OPTi Mini 386 **DX** M/B w/128K Cache **$84**

SYSTEM BOARDS (w/o CPU, 0K Memory)

Acer V11 486 VLB M/B w/256 Cache - ZIF **$350**
SIS 486DX2/DX4 VLB M/B w/256K - ZIF, Green **$155**

*"**PLEASE** CALL FOR ANY OTHER PRODUCTS THAT ARE NOT LISTED IN OUR **5 PAGE** AD"*

CPU's & RAM

MICROPROCESSORS (CPU)

Intel **PENTIUM 66MHz** CPU **$860**
Intel **PENTIUM 60MHz** CPU **$755**
Intel 486DX4-100MHz CPU **$770**
Intel 486DX4-75MHz CPU **$690**
Intel 486DX2-66MHz CPU **$410**
Intel 486DX-50MHz CPU **$430**
Intel 486DX2-50MHz CPU **$300**
Intel 486DX-33MHz CPU **$280**
Intel 486SX-33MHz CPU (PGA) **$125**
Intel 486SX-25MHz CPU (PGA) **$105**
AMD 486DX2-66MHz CPU **$365**
AMD 486DX2-50MHz CPU **$250**
AMD 486DX-40MHz CPU **$248**
Cyrix 486DX-40MHz CPU **$230**
Cyrix 486DX-33MHz CPU **$200**
TI 486DLC-40 CPU with Math Co **$120**
AMD 386DX-40MHz CPU (PQFP) **$45**
Intel 386DX-33MHz CPU **$64**
AMD 386DX-33MHz CPU **$64**

Modems

Intel Internal 144/144 Fax Modem **$169**
Intel External 144/144 Fax Modem **$189**
Intel PCMCIA 96/24 Fax Modem **$199**
Intel PCMCIA 144/144 Fax Modem **$299**
SatisFAXtion 100 Internal Fax Modem ... **$109**
SatisFAXtion 200 Internal Fax Modem ... **$235**
SatisFAXtion 300 Internal Fax Modem ... **$255**
SatisFAXtion 350 Internal Fax Modem ... **$279**
SatisFAXtion 400 Internal Fax Modem ... **$299**
SatisFAXtion 400e External Fax Modem . **$339**

Sportster 144/144 Int. Fax/Modem **$149**
Sportster 144/144 Ext.Fax/Modem **$169**

Aceex Modems

Internal 2400Baud Data Modem **$27**
Internal 9600/2400 Baud Fax/Modem ... **$40**
Internal 144/144 Fax/Modem **$109**
External 144/144 Fax/Modem **$139**
PCMCIA 96/24 Fax Modem **$159**

Mitac Modems

Internal 96/48/24 Fax Modem **$48**
Internal 144/144 Fax Modem **$120**
External 144/144 Fax Modem **$139**

Smart-Link Modems

9624BS-AD Int. 96/24 Fax Modem **$48**
9624BC-V7 Int. 96/24 Fax/Voice/Modem **$68**
1414BAV-A Int. 144/144 Fax Modem **$120**
1414AV-A Ext. 144/144 Fax Modem **$165**

Please call for prices of AT&T Paradyne, ATi, Best Data (Smart-One), Boca Research, Cardinal, Complete PC, Computer Peripherals, Hayes, Megahertz, Microcom, National Semiconductor, Practial Peripherals, Supra, Telebit, Xircom, Zoom Telephonics & ZyXel Modems and Communication Devices.

Keyboards

Chicony KB-5181 101keys Kbd **$38**
Chicony KB-5311 101keys Kbd **$23**
Chicony KB-5911 TrackBall Kbd **$63**
Focus-2001 101keys Kbd **$38**
Focus-2001B 101keys Kbd Black ... **$42**
Focus-6000 101keys Kbd **$34**
Focus-7000 101keys Kbd (Trackball) **$36**
Focus-8000 111keys Kbd (Calc.) **$45**
Focus-9000 128keys Kbd (Prog.) **$55**
Fujitsu-4700 101keys Kbd **$47**
Fujitsu-4870 101keys Kbd **$37**
Honeywell 101WN **$40**
Keytronics KT-2000 101keys Kbd ... **$35**
Mitsumi 101 keys kbd **$16**
MaxiSwitch 101 101 kbd **$36**
MaxiSwitch MaxiPro II kbd (Prog.) **$68**

Mice

Z-Nix Serial Mouse **$13**
MS-400 Serial Mouse w/ Pad (W) **$15**
MS-400 Serial Mouse w/ Pad (B) **$16**
Honeywell 3-Button Serial Mouse **$39**

Logitech

Logitech 2 Button Serial Mouse **$22**
Logitech First Mouse (Serial) **$35**
Dexxa Serial Mouse **$24**
MouseMan Bus Version **$69**
MouseMan PS2/Serial Combo **$56**
Trackman II (Serial) **$79**
Trackman Portable **$86**
MouseMan Cordless Mouse **$90**
CyberMan 3D Game Controller **$85**
ScanMan 32 w/Catchword OCR **$135**
ScanMan 32 w/Windows/OmniPage ... **$149**
ScanMan 256 w/Foto-Touch Software . **$168**
ScanMan 256 w/OmniPage OCR **$209**
ScanMan Easy Touch w/Omnipage **$209**
ScanMan Color **$419**
ScanMan Color w/Omnipage **$469**
Fotoman **$549**

Microsoft Corp.

Serial Mouse **$69**
Bus Mouse **$85**
PS-2 Mouse **$79**
BallPoint Mouse (PS-2 Version) **$89**
BallPoint Mouse (Serial,PS-2 Version) **$115**

Please call for prices of Kensington & Mouse Systems Mouse and CalComp. Kurta & Summagraphics Digitizers

Chassis (Cases)

CS-210GT Mid Vertical Case w/250W UL P.S. Call for Description **$120**
CS-300GT Full Vertical Case w/300W UL P.S. (7x5.25", Double fan) **$175**
CS-109T Desktop Case w/230W P.S. (2x5.25,1x3.5) **$56**
CS-609T Mini Vertical Case w/230W P.S. (2x5.25",3x3.5") **$54**
CS-709T Full Vertical Case w/230W P.S. (4x5.25",2HD, Digital) **$99**
CS-740 Mini Vertical Case w/220W UL P.S. (2x5.25",3x3.5",Door,Digital) **$66**
CS-760 Mid Vertical Case w/220W UL P.S. (3x5.25",3x3.5",Door,Digital) **$85**
CS-780 Full Vertical Case w/300W UL P.S. (5x5.25",2HD,Door,Digital) **$108**
CS-340D Mini Vertical Case w/230W P.S. (2x5.25",3x3.5",Digital) **$44**
CS-440D Mini Vertical Case w/230W P.S. Call for Description **$44**
CS-540D Mini Vertical Case w/230W P.S. Call for Description **$44**
CS-640D Mid Vertical Case w/230W P.S. (3x5.25",3x3.5",Digital) **$64**
CS-740D Full Vertical Case w/230W UL P.S. (4x5.25",2HD,Digital) **$78**
CS-20A Desktop Case w/230W UL P.S. (6x5.25",2HD,Digital) **$80**
CS-36 Full Vertical Case w/230W UL P.S. (6x5.25",2HD,Digital) **$120**
CS-836 MPC Desktop Case w/200W UL P.S. & 20Watts Speakers **$105**
CS-BG-85 Acer Mini Tower Case w/200 W UL P.S. **$69**
CS-BG-95 Acer Desktop Case w/200 W UL P.S. **$72**
CS-TK-370D Mini Tower Case w/200W UL P.S. **$70**
CS-TK-670D Desktop Case w/200W UL P.S. **$72**
CS-TK-970D Mid Tower Case w/200W UL P.S. **$85**
CS-TK-270D Slim Case w/200W UL P.S. **$75**
CS-TK-770D Full Tower Case w/250W UL P.S. **$120**

Printers

Canon

Canon BJ-10sx Bubble Jet Printer **$249**
Canon BJ-200e Bubble Jet Printer **$318**
Canon BJ-230 Bubble Jet Printer (Wide) **$408**
Canon BJ-300 Bubble Jet Printer **$333**
Canon BJC-600 Color Bubble Jet Printer **$595**
Canon BJC-800 Color Bubble Jet Printer **$1533**
Canon BJC-820 Color Bubble Jet Printer (Wide) **$1647**
Canon LBP-4 Plus 4PPM Laser Printer **$595**

CITIZEN

Citizen Notebook II Ink Jet Printer (Professional,Optional Color) ... **$318**
Citizen GSX-190 Printer (9pin/color option) **$159**
Citizen GSX-220 Quiet Printer (24pin/color option) **$185**
Citizen GSX-230 Quiet Printer (24pin/270cps/color option) **$226**
Citizen GSX-240 Quiet Printer (24pin/300cps/80col/color opt.) . **$290**
Citizen GSX-145 Printer (24pin/192cps/132col/color option) **$355**
**** Color Kit for Citizen GSX190, GSX-230 or GSX-240* ..... **+43**

Epson Action Printer 2250 (9pin) **$120**
Epson Action Printer 3250 (24pin) **$179**
Epson FX-870 Printer (9pin) **$275**
Epson FX-1170 Printer (9pin, Wide) **$368**
Epson LQ-570+ Printer (24pin) **$249**
Epson LQ-870 Printer (24pin) **$455**
Epson LQ-1070 Printer (24pin, Wide) **$395**
Epson LQ-1170 Printer (24pin, Wide) **$625**
Epson LQ-2550 Printer (24pin, Wide) **$930**
Epson Action Laser 1500 (1MB,6ppm) **$680**
Epson EPL-8000 Laser Printer **$885**

Panasonic Office Automation

Panasonic KX-P1150 Printer (9pin/240cps/80col) **$139**
Panasonic KX-P2023 Quiet (24pin/240cps/80col) **$199**
Panasonic KX-P2123 Quiet (24pin/240cps/80col/color opt.) **$235**
Panasonic KX-P2124 Quiet (24pin/320cps/80col/color opt.) **$315**
Panasonic KX-P2624 Quiet (24pin/300cps/132col) **$389**
Color Kit for Panasonic KX-P2180, KX-P2123 or KX-P2124* ..... **+45
Panasonic KX-P3123 Quiet (24pin/240cps/80col/color opt.) **$315**
Panasonic KX-P3124 Quiet (24pin/320cps/80col/color opt.) **$369**
Panasonic KX-P3624 Quiet (24pin/300cps/132col) **$428**
Panasonic KX-P4400 LED Page Printer (4ppm/1Mb/300dpi) **$549**
Panasonic KX-P5400 LED Post Script Printer **$849**
Panasonic KX-P4410 Laser (5ppm/512K/300dpi) **$549**
Panasonic KX-P4430 Laser w/SaintPrint (5ppm/1MB/300dpi) ... **$659**
Panasonic KX-P4440 Laser w/SaintPrint (10ppm/1MB/300dpi) . **$1189**
**** Please call for Panasonic Printer Accessories and Comsumables Products*

Hewlett Packard

Hewlett Packard Portable Printer **$349**
Hewlett Packard DeskJet 500 InkJet Printer **$319**
Hewlett Packard DeskJet 550C Color InkJet Printer **$549**
Hewlett Packard LaserJet 4L Personal Laser **$675**
Hewlett Packard LaserJet 4P Laser **$945**
Hewlett Packard LaserJet 4 Laser **$1395**
Hewlett Packard LaserJet 4M Laser **$1895**

Chassis (Cases) Continued

Diamond Series: (Black color model available +$3.00)

CS-130 Full Vert Case w/250W UL P.S. (4x5.25",2HD,Digital) ... **$118**
CS-230 Mid Vert Case w/250W UL P.S. (4x5.25",2HD,Digital) ... **$105**
CS-330 Mini Vert Case w/220W UL P.S. (2x5.25",3x3.5",Dig.) **$78**
CS-530 Desktop w/250W UL P.S. (2x5.25",2x3.5",2HD,Digital)... **$86**
CS-730 Baby AT w/220W UL P.S. (2x5.25",1x3.5,1HD,Digital) **$78**
CS-830 Slim Line w/220W UL P.S. (1x5.25",1x3.5",1HD,Digital) . **$81**
2nd Fan for Diamond Series cases (CS-130,CS-230,CS-530) **$10**

ESSENCE GROUP

Fountain Valley Order Hotline (714) 546-3110
FAX (714) 546-3803
17815 Newhope St. #G
Fountain Valley, CA 92708

IRVINE Order Hotline (714) 580-6990
FAX (714) 580-6996
6 Morgan St. Suite #130
Irvine, CA 92718

2% Cash Discount

Store Hours:
M-F 9am-6pm
Sat 10am-5pm

Multi Media & beyond

MULTIMEDIA 101

The State Of The Art, The Wrath Of The Gods

BY JONATHAN E.

Multimedia is an astoundingly broad term, encompassing a huge variety of applications, many of which are yet to be successfully implemented.

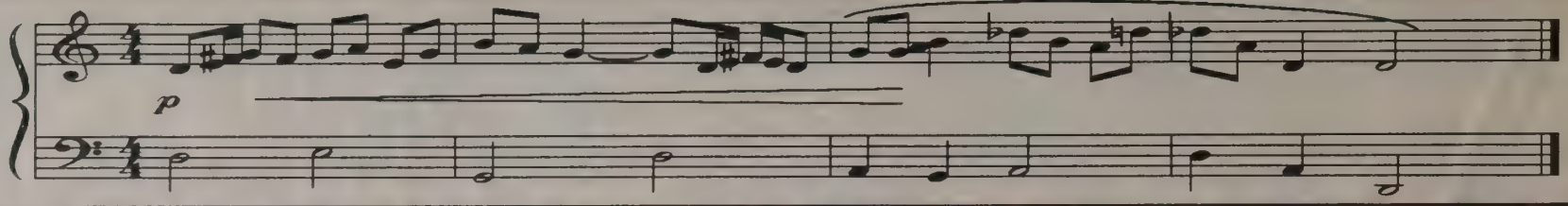
Concentrating only on its publishing aspects and leaving aside discussion of software and hardware tools, it can mean something relatively simple at the lower end—reference works or browsers with text; still graphics; and some degree of interactivity in the forms of hypertext, searching capabilities, and direct indexing. This type of multimedia is really nothing more than an electronic book, and, while marketing considerations dictate that it be called multimedia, the major difference between it and a book printed on paper is simply that it comes on a CD-ROM or, if the content is small enough, on a floppy disk.

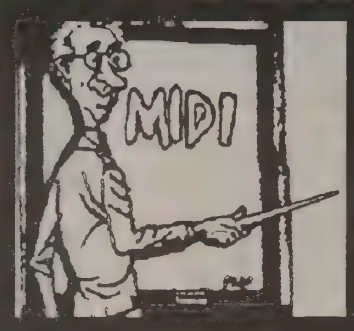
Inching up from that simple state are titles that add sound and moving graphics, either as video or animations. Of course, you cannot include sound or video on a printed page, so this does represent a genuine leap in capabilities. However, in many cases the content might be as effectively communicated with a combo package of book and CD or videocassette, or even video alone.

One advantage of the computer-based medium is that the manufacturing cost of a CD-ROM is much lower than the printing cost of a substantial book. Associated with this is the ability to include much more material. Another, and perhaps more significant, advantage is that the linking of text to sound or video can be much tighter than if the content is spread between two media sources.

On the other hand, the market for books, CDs, and videotapes is currently much larger than that for computer-based media. When the sound is designed to be triggered by user action, i.e. clicking a remote control in response to a text cue, it is possible to achieve a fairly precise linkage between text and sound with random-access storage, such as CD, as opposed to linear-access storage, such as video tape. Thus, if one were presenting a guide to

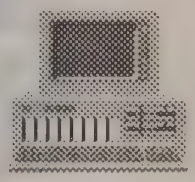
Copyright © 1994 by Jonathan E. All rights reserved. *Jonathan E. has worked with desktop multimedia since 1988. He also writes about world music and the Archaic Revival for* BAM. *His USPS mailing address is c/o SoundSwell, 54 29th St., Richmond, CA 94804. His email address is jeve@well.sf.ca.us*





MAKE MUSIC WITH YOUR COMPUTER

PC MultiMedia



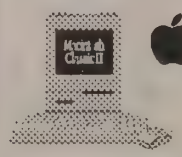
Complete System!

CD Rom w/Free CDs, Speakers & More!

486DX-40 CPU
1meg video
1024x768 monitor
260mgHD
keyboard
mouse
Dos 6.2
Windows 3.1
PC200mkII Midi Kybd
SndBlaster Mult. Kit
Installation & Training

$2099

Apple® Peavey®



Music Starter System

Color Classic 4/80
EZ Music Starter Kit:
- Book of Midi
- EZ Vision
- Band in a Box
- Interface

Peavey DPM2
260 Drum Patts
Installation
Training Included

$2299
Complete with Velocity, Multitimbal Keyboard

SAVE $1300!

April Seminars

Atari

w/ Factory Rep
April 13, 20 5 & 7 PM
8 Tracks Digital Audio System

Passport

Producer Pro
Musictime 16
April 28 7:30PM

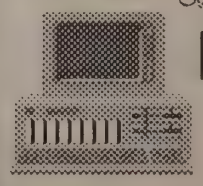
Seq. Classes

Performer 5.0 May 3
Vision 2.0 May 5

PC

turtle beach systems

Roland



Monterey Midi System

486DX-40 CPU
1meg video
1024x768 monitor
340mgHD
keyboard
mouse
Dos 6.2
Windows 3.1
PC200mkII
Cakewalk Win
Installation & Training

$2599

Plays 2 Tracks of Digital Audio w/4 meg rom of Sample Sounds w/ EFX!

The Latest Products & Largest Inventory of Music Software!

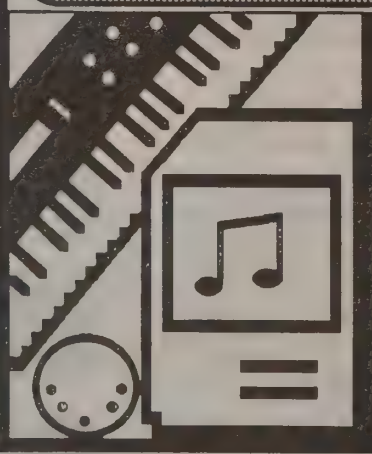
- Spanish Master Tracks Sale
- Academic Finale $250
- Steinberg Cubase PC $219
- Roland RAP-10 SALE
- Over 100 Midi Help Books!
- Dr Synth & SCC1 Sale
- Cakewalk 4.0 Seq $99
- Band in a Box Pro $69
- PowerTracks Seq $29
- Midi Interfaces from $25
- Noatation Prgm from $50
- Peavey DPM 3se $1695
- Passport Producer Pro Sale
- General Midi Files from $12
- Turtle Beach Maui In Stock
- SAW 8 Track softwr $499
- Atari Falcon 030 $799
- Roland JV80 Price Too Low to Print

Mac/PC Session In Stock

Encore & Master Tracks Both for $399

8 REASONS TO PURCHASE FROM US:

1. FREE Phone Support on Products purchased from us.
2. EZ Financing & Leases
3. Over 1000 Midi Programs!
4. Private Tutoring in your home or studio by the experts
5. FREE Monday Nite Midi Introduction Seminars
6. Notation & Sequencer Classes
7. Finale User Grp meet 4th Wed
8. Computer Swapmeet in Pomona May 14,15



The Electronic Music Box

14947 Ventura Blvd. Sherman Oaks

(818) 789-4250

-Music/Midi BBS (818) 789-4287

MultiMedia & beyond

Scenes from Wrath of the Gods

music for example, a book-CD package might well make more economic sense and may do the material more justice.

A couple of examples are the book-CD sets of *Voices of Forgotten Worlds—Traditional Music of Indigenous People* from Ellipsis Arts—although the book part of this is on the slim side, there's more music on the two CDs than you could fit on a CD-ROM—and *Zouk: World Music in the West Indies* by Jocelyne Guilbault from The University of Chicago Press.

These first two types are pretty pedestrian aspects of multimedia but are well represented in the marketplace. Many titles are shovelware (pre-existing material reused at relatively low cost), and undoubtedly we will continue to see many examples. As Fabrice Florin pointed out in last month's Multimedia 101 column, and as anyone who has clicked and clicked on buttons to get to the next screen or launch sounds or videos knows from firsthand experience, the basic problem is that this approach produces results that are not very compelling.

Good content and design can overcome this deficit to a certain extent. An example of a title that works in this type of multimedia is the CD-ROM version of Marvin Minsky's *The Society of Mind* from Voyager, which expands upon the original printed text in a relatively simple fashion with video and cross-referencing, but is done elegantly and thoughtfully enough to produce an engaging experience.

In addition to these two types are many others. There are games, which use plenty of advanced multimedia techniques, but in many cases are emotionally flat, relying on the visceral thrill of the twitch and vanquishing evil opponents with a blast. There are a few interactive music products ranging from educational to mix-it-for-yourself musical building blocks. There are various film- and art-based titles. There are some plain fun but rather silly, almost comic-book items, such as Rodney's Wonder Window by Rodney Alan Greenblatt from Voyager.

Of course, there are tons of titles for children, usually involving cute animated animals, contemporary nursery rhymes, and something educational such as a foreign language or spelling. Video-mixing game play seems likely to become a fairly common type of product. However, even though they may tax computing power and programming skills, all these forms of multimedia are conceptually fairly simple and straightforward.

THE NEW SENSATION AND EXPERIENCE OF MULTIMEDIA

The current state of multimedia is often compared to the state of film before D. W. Griffith, but I think a more accurate depiction might be that it's like music before synthesizers—there's a lot of it around, it's very varied, there's imagination galore amongst its practitioners, but it's shackled to a sort of earthbound lack of flexibility, the texture is not sufficiently malleable.

There's a school of thought that believes that real art is independent of technology and techniques, that if you have something to say you'll say it regardless of the materials you have at hand, but I am not of that school. In painting alone, for example, the introduction of both portable oil paints and watercolors led to new forms of expression. Subsequent advances in appropriate technologies—sound recording, photography, screen printing—have all led to new art forms. I cannot believe that all the newfound artists in those media would have found the means to express themselves through only prior technologies.

Likewise, visionaries project a potential whole new means of artistic expression, where computer-based multimedia will

Novell Classes

"The Careers of the 90's"

Take the Novell Classes You Need
to Become Novell Certified
Choose Our Certificate or Diploma Programs

Novell Education Academic Partner

Features
- ✔ 3 to 12 Month Programs
- ✔ Small Classes
- ✔ Morning, Afternoon, Evening, Saturday and Sunday Classes
- ✔ Certified Instructors
- ✔ Lowest Tuition Rates
- ✔ Novell Testing Site
- ✔ ECNE & CNA (v3.1x or 4.0)

Benefits
- ✔ Intensive & Comprehensive
- ✔ Personal Attention
- ✔ Convenient Hours
- ✔ Certified Novell Instructors
- ✔ Why Pay More?
- ✔ Take Your Certification Exams Here
- ✔ New Offerings

Drake Authorized Testing Center
"Novell Education Academic Partner"

Mt. Sierra College
350 N. Halstead, Pasadena, CA 91107

VISA MasterCard DISCOVER

1 (800) 240-2500 • (818) 351-9995

Your Best CDROMs!

Cica MS Windows CDROM	4000 new Windows programs - quarterly updates	$ 29.95*
Giga Games CDROM	3000 hot Games for MSDOS and Windows	$ 39.95*
Space and Astronomy CDROM	Thousands of NASA images and data files	$ 39.95*
C User Group Library CDROM	A collection of user supported C source code	$ 49.95*
Simtel MSDOS CDROM	Classic: 650 MB Shareware / Freeware for MSDOS	$ 29.95*
QRZ! Ham Radio CDROM	FCC Callsign Database for Win & DOS + files	$ 29.95*
Gifs Galore CDROM	6000 mostly 640x480 GIF Images in every catagory	$ 39.95*
Gutenberg Project CDROM	Classic Literature and historical documents	$ 39.95
Hobbes OS/2 CDROM	600 MB always current Shareware/Freeware for OS/2	$ 29.95*
Source Code CDROM	650 MB of Unix & DOS source code for programmers	$ 39.95*
Internet Info CDROM	Thousands of computer, net, and internet documents	$ 39.95
X11/GNU CDROM	X Windows and GNU software for Unix and SPARC	$ 39.95
Aminet Amiga CDROM	650 MB new Shareware/Freeware for Amiga	$ 29.95*
GEMini ATARI CDROM	650 MB 3000 Programs for Atari - also for BBS use.	$ 39.95*
Ada CDROM	Programming tools, Ada source code and docs	$ 39.95*
Nova for NeXT CDROM	600 MB black NeXT app's, src., docs, etc	$ 59.95*
Nebula for NeXTSTEP Intel	600 MB NeXTSTEP Intel app's, docs, etc	$ 59.95*
Garbo MSDOS/Mac CDROM	MSDOS and Macintosh Shareware/Freeware	$ 29.95*
Fractal Frenzy CDROM	2000 high resolution fractals - royalty free	$ 39.95
FreeBSD CDROM	Berkeley BSD. 32bit O/S for PC, w/ GNU & X11. Src	$ 39.95
Linux CDROM	Yggdrasil Linux. 32bit O/S for PC, w/ GNU & X11. Src	$ 49.95
La Coleccion CDROM	MSDOS, OS/2, Windows. Spanish descriptions	$ 39.95*
Sprite CDROM	Berkeley's experimental Distributed OS for Sun's	$ 29.95
CDROM Caddies	Standard type, highest quality, Lifetime guarantee!	$ 4.95

*Shareware programs require separate payment to authors if found useful.

Walnut Creek CDROM
4041 Pike Lane, Suite D-451
Concord, CA 94520
1-800-786-9907
1-510-674-0783
Fax: 1-510-674-0821
orders@cdrom.com
All Our Discs Are Unconditionally Guaranteed

Tell Them You saw it in MICROTIMES

MultiMedia & beyond

produce new sensations and experiences far beyond what traditional media can produce. Much of the thinking here is based upon an expansion of the effects of traditional literary and cinematic media. Take the emotional grip or intellectual intrigue of a good book or movie, add the ingredients that only computer-based media can provide—interactivity, a selection of randomly generated content, game playing and score keeping—and perhaps a new sort of experience will emerge. It's as though we were in the time before the outer planets were discovered. Calculations indicate that there must be something out there, but we haven't actually seen what it is yet.

Products like Myst and Xplora 1 are edging toward this unknown territory. Wacky Jacks and Travelrama USA aim for the same place in a different way. I find all these titles successful because they do manage to produce an experience, primitive as it may be, that video, books, or sound alone cannot produce. The principal element of that experience is involvement. That involvement is the result of at least minimal storytelling in the framing of the experience.

It's nothing new for computers to involve people, as any programmer or online addict can testify; what's desired here is an artistically induced involvement that has appeal to those who don't expect to find it through a computer.

SOME DIFFICULTIES, SOME SOLUTIONS

This is no easy task. Nonlinear and interactive storytelling poses some fundamental problems, as a look at the "Passivity & Interactivity," "Is Interactive Literature an Oxymoron," "Emotion and Entertainment," and "Interactivity vs. Creativity" topics in the WELL's Muchomedia conference will quickly show.

Other difficulties are posed by the physical aspects of using a computer. A simple one is the issue of where the computer is likely to be in the home, as mentioned by Fabrice Florin. Obviously, this is something that will change with time as computers become more accepted as entertainment devices.

However, there remain larger issues. Consider the different experiences of watching a movie in a theater and watching it at home on tape. In the theater, with its large screen, continuous and high-definition (you hope) projection, compatible audience (you also hope), and sense of occasion, a good movie is considerably more intense. At home, with the smaller screen, the poor resolution, the phone ringing, the informality, the movie has to overcome many more obstacles to be a truly intense experience.

Likewise, a computer has a relatively small screen; resolution and palette mangement reduce the visual quality; a good multimedia product requires more than a single sitting to thoroughly and comfortably explore (as it should, considering its retail price); and there are interruptions due to the informality of computer use. None of these are insurmountable obstacles—after all a book faces the same general difficulties and there's no shortage of completely absorbing books.

RESOURCES:

Wrath of the Gods (Macintosh/MPC versions), $79.95
Maxis
2 Theatre Sq.
Orinda, CA 94563-3346
1-800-33-MAXIS

Luminaria
3288 21st St.
San Francisco, CA 94110
(415)821-2055

COMPUTiX systems at LOW PRICEs, with MULTIMEDIA or without

VESA LOCAL BUS 486

- 486DX/SX CPU
- Pentium (P24) Upgradeable
- 4Mb RAM, 128k Cache
- 250Mb 13ms IDE Hardrive
- Vesa Local Bus IDE Controller
- 14" SVGA .28Dpi N-I Monitor
- VLBus Video Accelerator SVGA 1Mb
- 1.44Mb Floppy Drive
- Mid-Tower Case, W/ 6 Drive Bays
- 7 ISA Slot and 3 VLB Slots, 2s/1p/1g
- 101 Spill-Resistent KeyBoard & Mouse

486SX-33 $950
486DX-33 $1125
486DX2 66 $1295

ISA 486DLC 33

- Cyrix 486DLC CPU
- 4Mb RAM, 64k Cache
- 170Mb 15ms IDE Hardrive
- IDE W/ 2Serial, 1Par., 1g Controller
- 14" SVGA .39Dpi Monitor
- SVGA 1Mb Card
- 1.44Mb Floppy Drive
- Mini Tower Case
- 7 ISA Slot Slots
- 101 Spill-Resistent KeyBoard & Mouse

$795

486DX2 50 Family PC

- 486DX2- 50MHz CPU
- Pentium (P24) Upgradeable
- 4Mb RAM, 256k Cache
- 250Mb 13ms IDE Hardrive
- Vesa Local Bus IDE Controller
- 14" SVGA .28Dpi N-I Monitor
- VLBus Video Accelerator SVGA 1Mb
- 1.44Mb Floppy Drive
- Mid-Tower Case, W/ 6 Drive Bays
- 7 ISA Slot and 3 VLB Slots
- 101 Spill-Resistent KeyBoard & Mouse

$1125

MULTIMEDIA ...$1525
W/ 2X CD-ROM, SOUND BLASTER 16 BITs VOLUME SPEAKERs, 5 MPC CD TITLEs DOS 6.2 & WINDOWS 3.11

Optional Upgrades

- MULTIMEDIAs
  2X Panasonic CD-Rom, 16bit Sound Card (Sound Blaster 16), Volume Controller Speaker, and 5 MPC Titles (Encylopedia, US & World Atlas, Mavis Typing Tutor, Chess Game.)
  $345
- 2X, 320ms CD-ROM Drive $175
- 2x, 200ms, SCSI Toshiba 3401 ....$345
- 2X, 250ms, SCSI Toshiba 4301 ....$285
- 96/24 Internal Fax/Modem $45
- 14.4k Internal Fax/Modem $115
  W/ Bitfax Software
- 4Mb Extra SIMM $140
- Upgrade 14" NI to 15" Monitor $115
- DOS 6.2 & WINDOWS 3.11 .....$Call

VESA / PCI / PENTIUM PERFORMANCE systems

486DX2 66 Extra

- 486DX2 66MHz CPU
- Pentium (P24 Upgradable)
- 8Mb RAM, 256k Cache
- 340Mb 13ms IDE Hardrive
- Vesa Local Bus IDE Controller
- 15" .28D N-I Edge to Edge Monitor
- WD VLB Graphic Accelerator 1Mb
- 1.44Mb Floppy Drive
- Mid-Tower Case, W/ 6 Drive Bays
- 7 ISA Slot and 3 VLB Slots, 2s/1p/1g
- 101 Spill-Resistent KeyBoard & Mouse
- MS-DOS 6.2 W/ Manual

8MB/340MB	8MB/420MB
$1595	$1635

PCI 4DX2 66 SCSI-II

- 486DX2 66MHz CPU
- Pentium (P24) Upgradeable
- 8Mb RAM, 256k Cache
- 540Mb 12ms SCSI-2 Hardrive
- PCI SCSI-2 Controller
- 15" SVGA .28Dpi N-I Monitor
- Hi Performance PCI Graphic W/2Mb
- 1.44Mb Floppy Drive
- Mid-Tower Case, W/ 6 Drive Bays
- 4 ISA Slot and 2 64 Bits PCI Slots
- 101 Spill-Resistent KeyBoard & Mouse
- MS-DOS 6.2 W/ Manual

8MB/540MB	16MB/1GB
$2035	$2675

PCI 4DX2 66 IDE

- 486DX2 66MHz CPU
- Pentium (P24) Upgradeable
- 8Mb RAM, 256k Cache
- 420Mb 12ms IDE Hardrive
- Hi Performance IDE PCI Controller
- 15" SVGA .28Dpi N-I Monitor
- Hi Performance PCI Graphic W/2Mb
- 1.44Mb Floppy Drive
- Mid-Tower Case, W/ 6 Drive Bays
- 4 ISA Slot and 2 64Bits PCI Slots
- 101 Spill-Resistent KeyBoard & Mouse
- MS-DOS 6.2 W/ Manual

8MB/420MB	8MB/540MB
$1830	$1950

PENTIUM P5 60

- Pentium P5 60MHz CPU
- 64Bit Bus & CPU
- 8Mb or 16RAM, 256k Cache
- 420Mb 12ms IDE Hardrive
- PCI IDE Controller
- 15" SVGA .28Dpi N-I Monitor
- Hi Performance PCI Graphic W/2Mb
- 1.44Mb Floppy Drive
- Mid-Tower Case, W/ 6 Drive Bays
- 4 ISA Slot and 3 PCI Slots
- 101 Spill-Resistent KeyBoard & Mouse
- MS-DOS 6.2 W/ Manual

8MB/420MB	16M/540MB
$2590	$2950

COMPUTER PARTs with 1 Year Warranty

MOTHERBOARDs

386DX, 40MHz, 64k, CPU $120
486DLC, 33MHz, 64k, CPU $125
486DLC, 40MHz, 64K, CPU $155

VLB 486SX-40 128K, CPU $195
VLB 486DX-33 256K, CPU $345
VLB 486DX2-50 256K, CPU $355
VLB 486DX2-66 256K, CPU $505
PCI 486 256K, SCSI-2 no cpu $295
PENTIUM P5 60 W/VLB, CPU ...$1295

387 MATH CO CHIP $45
287 / 387SX $35/45

AT MEMORY EXPANSION BOARD

UPGRADE Your 286, 386, 486 Memory With AT RAM Board Either Extend of Expand RAM, 8Mb Maxium, Use SIMMs

Board Only ...$55 2Mb...$125
4Mb .....$205 8Mb....$355

MEMORY UPGRADES

SIMM MODULEs & DRAMs

1x9-80	$45	512x36	$95
1x9-70	$49	1x36	$165
1x3-80	$38	2x36	$365
1x3-70	$39	4x36	$645
4x9-70	$155	8x36	$call
Dram 1MB	$5	1MBx4	$19
Video 256k	$6	Vram 44256	$15

LASER PRINTER MEMORY

HP Laserjet II, IID, III, IIID	2MB	$99
	4MB	$185
HP Laserjet 4L	1MB	$68
HP Laserjet 4, 4M, 4P, IIIsi	2MB	$95
	4MB	$160
	8MB	$355
OKI Laser 400	2MB	$105
OKI Laser 800, 820	2MB	$129
	4MB	$123
PANASONIC 4420, 4450i, 4410, 4430	2MB	$119
	4MB	$189
PANASONIC 4455	2MB	$159

Please call for Other, we also do NOTEBOOK !!!

HARD DRIVE

WD/MAXTOR/CONNER/QUANTUM
170 / 250MB IDE 14ms $185/235
340MB IDE 13ms $285
420MB IDE 13ms $305
545MB IDE 12ms $445
545MB SCSI-2, 12ms $495
1 GIB SCSI-2 10ms .....$CALL
1.44MB 3.5" FLOPPY $35
1.2MB 5.25" FLOPPY $45
250MB TAPE BACKUP $145
EXTERNAL 250 TAPE $350

CONTROLLERS

MFM / RLL F/H.....$40/45
ESDI CONTROLLER.....$75
IDE COMBO W/ 2S,1P,1G $17
IDE VLB COMBO W/ 2S,1P,1G $29
IDE VLB CACHE CONTROLLER $145
SCSI-2 VLB CONTROLLER $125
MYLEX EISA SCSI CACHE $295
PCI SCSI-2 / IDE HDD $85/65

MONITOR

14" SVGA .39DPI /.28D $215/245
14" SVGA .28DPI NI $255
15" SVGA .28DPI NI $335
SCEPTRE 15" SVGA .28DPI DIG ...$365
SCEPTRE 17" SVGA .28DPI DI.....$745

VIDEO CARD

SVGA 512K / 1MB ISA $45/65
VLB 1MB SVGA $85
VLB 1MB WD PARADISE $125
VLB 1MB VRAM SPIDER GR. $195
PCI 2MB TSENG W32P $195
PCI 2MB VRAM DIA. VIPER $445

FAX/MODEM & NETWORK

INTERNAL 14.4K CALCOM $125
EXTERNAL 14.4K CALCOM $145
96/24 INTERNAL $45

16BIT ETHERNET GATEWAY $55
16BIT ETHER. 10BT $65

ESTIMATES FREE TECH SUPPORT

Friendly Service

COMPUTiX

Computers & Memory Products

1 YEAR WARRANTY PARTs & LABOR

NETWORK SERVICES

714-540-5131

3480 W. Warner Ste. E Santa Ana, CA.92704 - FAX (714) 540-5139 - HOUR M-F 9AM-6PM SAT 11AM-5PM

All Sale Items Are Based on COD, Cash or Cashier Check - 14 Days Money Back Guarantee, Exclude Shipping Fee - One Year Parts & Labor Warranty
All Brand Names Are Trademarks Of Their Respective Companies - Prices And Specifications Are Subject To Change Without Notice.

ALPHA INTERNATIONAL
THE EXPERTS
MULTIMEDIA, BOOKS, SHAREWARE, UPGRADES & CUSTOM CONFIGURATIONS

ALPHA SYSTEM 486 VESA LOCAL BUS

Pentium Upgrade
256K Cache
4MB RAM On Board
VL-Bus IDE/IO
VL-Bus SVGA Card 1MB
250MB Hard Drive
1.2 & 1.44MB FDD
14" .28dp Monitor
Mini-Tower Case
101 Keyboard
Free Hi-Resolution Mouse

	Regular	Cash
Intel DX2-66	$1330	$1260
Intel DX-50	$1300	$1240
Intel DX-33	$1150	$1090
Intel SX-33	$930	$875
Intel SX-25	$910	$855

ALPHA INTEL PCI SYSTEM

256K Cache
4MB RAM on board
1.2 & 1.44MB Floppy Drive
PCI SVGA Card w/1MB
PCI IDE Controller Card
250MB Hard Drive
14" SVGA .28dp Monitor
Mini-Tower Case
Free Mouse

	Regular	Cash
Intel DX2-66	$1598	$1558
Intel DX-50	$1548	$1498
Intel DX-33	$1398	$1358
Intel SX-33	$1298	$1258
Intel SX-25	$1238	$1198

486 DLC-40 128K CACHE

Math Co. Included
Multi IDE/IO
SVGA w/1MB Trident
1.2 & 1.44MB FDD
250MB Hard Drive
14" SVGA .28dp Monitor
Mini-Tower Case
101 Keyboard
Free Mouse

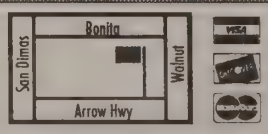
	Regular	Cash
486DLC-40	$950	$890
386DX-40	$875	$820
486SLC-33	$850	$815

INTEL 60 MHz PENTIUM

512K Cache On Board
8MB RAM
1.2 & 1.44MB FDD
420MB IDE Hard Drive
PCI IDE Controller Card
I/O 2 Serial/1 Parallel
Diamond Viper PCI Display w/2MB
15" NI SVGA Monitor
101 Keyboard
Mid-Tower Case
Free Mouse

Regular $3086 Cash $3048

All Parts and Upgrades Available



129 E. ARROW HWY. SAN DIMAS, CA 91773
TEL: 909-599-3567
FAX: 909-599-7584
PRICES AND AVAILABILITY SUBJECT TO CHANGE WITHOUT NOTICE
HOURS: M-F 9-6:30 SAT. 9-4

MultiMedia & beyond

I have noticed some basic guidelines to successful multimedia products of this experiential type. The vital element is the creation of a world that the user feels part of. An important technique is to use the whole screen without distractions such as a menu bar. A corollary of this is that the user should be able to do everything without choosing different tools to do different things. Besides strong characters, attractive art, and good production values, some sort of game play or puzzle solving help to draw the user in. Essentially these techniques serve to suspend the disbelief of the user and keep him or her involved in the imaginary world.

For repeat use, randomly selected puzzles from a larger collection will keep the experience fresh. As always, there are exceptions to these guidelines, and what one person finds successful will be dull to another.

WRATH OF THE GODS

Wrath of the Gods is a large imaginary world based on ancient Greece and its myths. It does not follow several of the above guidelines, which makes it more work to derive an enthralling experience from it, yet eventually I became sufficiently involved to enjoy it.

The basic plot is that you are the abandoned offspring of a king; you must follow the hero's way to recover your kingdom and to free your subjects from the tribute demanded by King Minos of Crete, who uses them as victims for the Minotaur in the labyrinth of Crete. This was originally one of the stories about Theseus, but the whole Wrath adventure is actually a compilation of the legends of various Greek heroes, including Hercules, Jason, and Perseus, along with other tales of Theseus.

It's nothing new for computers to involve people, as any programmer or online addict can testify; what's desired here is an artistically induced involvement that has appeal to those who don't expect to find it through a computer.

A quick glance at Wrath of the Gods is not very promising. The play area extends across the screen, but there is a large area at the bottom containing buttons for the five different modes of the game: walking, doing, listening, looking, and using your inventory of acquired objects. You can scroll down to another bank of buttons that allow you to consult the Oracle; read background information on the Greek myths; call up the map of the entire game; call up the setup menu to change volume, save or load games, or quit; and access the help system. Certainly not all these latter options could be accessible from the play area itself, but the constant clicking on the first bank of buttons to select walk, do, listen to what the characters have to say, or look at objects is tedious. Myst, with a similar choice of actions, manages to incorporate all these options into the play area. Wrath of the Gods does allow you to choose these actions from the keyboard, but that is only a small improvement.

The look of Wrath of the Gods is another hurdle to get over. The screens are photographic images, shot on location in Greece, and of reasonable quality. However, the problem comes from the way the characters' movements are handled. Basically a QuickTime window of the action is used against the still background. Sometimes this works quite well, but overall it produces a strange and very unlifelike jerky effect that takes a lot of getting used to.

The characters themselves are cartoonish, partially from the use of the above technique to describe motion, but more importantly because the acting is extremely unsubtle and there is a jokey anachronism prevalent in the writing of their lines. Female characters suffer from being portrayed either as stereotypical sex kittens or as withered old crones.

Strangely, however, after a couple of hours of using Wrath of the Gods, I found myself ignoring these drawbacks and engaged in the ancient Greek experience. A good part of this is due to the quality of the storyline—the archetypal power of the Greek myths reverberate into the cyberage. Wrath of the Gods background information on the myths is very good, and even on occasion pokes fun at its own anachronisms. It is also only fair to report that other people who have seen Wrath of the Gods found it a much more immediately engaging experience than I did. ■

WE REPAIR HARD DRIVES • LAPTOPS • COMPUTERS • MONITORS • FLOPPY DRIVES

ACER • ALR • APPLE • AST • AT&T • DELL • EPSON • CANON • COMPAQ • DEC

PANASONIC • POQET • SAMSUNG • SHARP • SUN • TANDON • TI • TOSHIBA • ZENITH

WESTERN DIGITAL

420MB IDE
Hard Drive

$279

MICROSOFT MOUSE

ONLY
$35!

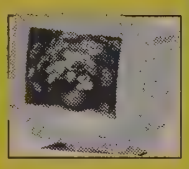
14.4K INTERNAL FAX/MODEM

V32, V32bis, V42,
V42bis w/MNP5

$105

15" SVGA MONITOR

(1280x1024, .28mm Dot Pitch)
Model SRC - 1501
Full Screen
VESA Standard



$329

SHAMROCK

AT 486SLC-2/50/66MHz IBM MANUFACTURED MOTHERBOARD

- Minitower Case + 230W P/S
- IBM MB 486SLC-2
- 4MB RAM + 250MB Hard Disk
- 1.2 + 1.44 FDD
- IDE Control w/I/O
- 101 Keys Maxi Keyboard
- Serial Mouse
- SVGA Card w/1MB
- SVGA Monitor

$1130 (50MHz) **$1145** (66MHz)

SUPER LOW PRICES!

COMPUTER PRICE WAR

HAS BEEN LAUNCHED BY

KATRONIC TECHNOLOGY

COMPUTER SALES & SERVICES
WE DELIVER ADVANCED TECHNOLOGY
Excellent Quality • Reliable Service • Competive Prices

CD-ROM + Sound Card

DOUBLE SPEED INTERNAL

Only **$309!**

CASES

Mini + P/S	$45
Medium + P/S	$69
Full Size + P/S	$92
Desktop + P/S	$55
Black Cases	CALL

COMPONENTS

MB 486DX/XX VESA	$99
MB 386DX/40	$95
Trident VLB 32	$80
Shamrock 14" N.I.	$235
250MB Tape Colorado	$175
Diamond Stealth VLB	$149
AT I/O + FDD/HDD VLB	$25
KB 101 Keys MAXI	$33
Pro Audio Spectrum 16	$145
Promise IDE Caching Controller	$109
Hard Disk 540MB	$430
All SCSI Hard Disk	CALL

MEMORY SIMM

1MB SIMM (3 Chips)	$38
4MB SIMM, 70ns	$149
1M * 36 (4MB), 70ns	CALL
2M * 36 (8MB), 70ns	CALL

MEMORY PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

IPM

486DX-33/66MHz

$1429/$1599

- Medium Tower Case w/Double Fans
- 230W Power Supply
- MB 486DX-33/66MHz w/256K Cache
- 4MB RAM
- 5.25" And 3.5" Diskette Drivers
- FDD/HDD Controller + I/O
- 420MB 12ms IDE Hard Drive
- 3 Buttons Mouse
- SVGA 32 Bit w/1MB RAM
- 15" Non-Interlaced SVGA Monitor Shamrock
- 101 Key Maxi Keyboard
- VESA Local Bus

intel inside

VESA LOCAL BUS

UPGRADE CLONE SYSTEM

Replace The Motherboard + CPU + Memory

XT To 486SX-33MHz w/1MB Memory, Texas Instr./CPU....$145
286 To 386DX-40 MHz +128K Cache w/1MB Memory.....$159
AT System To 486SLC-2* 66MHz + 1MB Memory.....$279

*IBM Manufactured Mainboard

FREE LABOR!

MEMORY UPGRADE

FOR:
LAPTOP • NOTEBOOK • PS/2 • ALL BRAND NAMES & MODELS!

FREE INSTALLATION

FOR:
HARD DISK • CD ROM • MOTHERBOARD • ALL MISCELLANEOUS HARDWARE & SOFTWARE (If you order from KATRONIC)

(714) 897-3234 or (714) 895-2084

KATRONIC COMPANY

FAX: (714) 897-9853
14382 HOOVER ST., SUITE A9,
WESTMINSTER, CA 92683

ONE YEAR WARRANTY PARTS & LABOR

MasterCard VISA

WE REPAIR HARD DISKS • LAPTOPS • COMPUTERS • MONITORS • FLOPPY DRIVES

ASEAN COMPUTER TECHNOLOGIES

I N C O R P O R A T E D

• 971 FAIRWAY DRIVE • WALNUT, CALIFORNIA 91789 • TEL: (909)598-2828 • FAX: (909)598-5748 •

GENISYS 80486 VESA LOCAL BUS SYSTEM w/P24T PENTIUM SOCKET

MAY SUPER SPECIAL
#1 UPGRADE TO 15" CTX 1560LR 1024X768 .28 NI LOW RADIATION ADD $120
#2 UPGRADE TO S3 ACCL. "FASTER THAN STEALTH 24VLB" ADD $50

MULTIMEDIA UPGRADES
special w/system purchase only

- Panasonic 562 w/int Internal $160
  Dual speed, 315ms,150/300KB/sec
  Multisession/Kodak PhotoCD ready
- Toshiba 3401B Internal CD-ROM $320
  Dual speed, 200ms,150/300KB/sec
  Multisession/Kodak PhotoCD, SCSI
- NEC CDR510 3X Internal CD-ROM ... $355
  Tripple Speed, 195ms, 450KB/sec,
  Multisession/Kodak PhotoCD, SCSI
- Pair of 80W Speackers $65
- Mozart 16-bit MCD Sound Card $88
  - Sound Blaster Pro Compatible
  - Sony,Pansonic,Mitsumi CD Interface
- Media Vision Pro Jazz 16 ..... $110
  - Improved Audio Spectrum w/Wave Table
  - Built-in SCSI CD Interface
- MPC UPGRADE KIT
  - Media-Vision Pro Jazz 16
  - Stereo Speakers, Microphone
  - Powertools, Encyclopedia, World Atlas
  w Toshiba 3401B Internal CD-ROM $420
  w/NEC CDR510 3X SCSI CD-ROM $480
  w/Panasonic 562 CD ROM +int $295

- PENTIUM OVERDRIVE READY
- 256K CACHE
- 32BIT SVGA BOARD 1MB VESA BUS ACCELERATOR, 1280X1024
- 32 BIT VESA BUS IDE INTERFACE & AT I/O (2SER/PAR/GAME)
- 4MB RAM (EXP. TO 32MB)
- MEDIUM TOWER W/230WP.S.
- TEAC 1.2 & 1.44 FLOPPY DRIVES
- 101 ENHANCED K/B
- 250MB IDE HD (15 MS)
- 14" SVGA (1024X768) MULTISYNC .28 MM NON-INTERLACE MONITOR
- HI-RES 3-BUTTON (MS COMP.) SERIAL MOUSE

- GENISYS VESA LB 486DX-33 .. $1050
- GENISYS VESA LB 486DX2-50 $1100
- GENISYS VESA LB 486DX2-66 $1200

Price Subject to Changes

UPGRADE SPECIALS

- ADDITIONAL 4MB RAM ..... +$160
- 330/420/535MB IDE HDD ..... +$60/100/215

SPECIAL *Adaptec 1542C SCSI Ctrl. & Fast 1.2GB SCSI-II H.D.* $999

- VLB Orchid Fahrenheit 1280+ Accel .. +$70
- VLB Orchid Celcius w/1MB ..... +$130
- VLB ATI Mach32 Accel ..... +$300
  w/2MB VRAM, 16 Million Colors
- VLB Diamond Speedstar/Stealth 24 +$50/80
- VLB Diamond Viper ..... +$280

14" VIEWSONIC 14E .28mm NI (1024x768) ..... + $80
15" VIEWSONIC 15 .27mm NI (1280x1024@NI) + $200
15" VIEWSONIC 15E .28mm NI (1024x768@NI) + $150
14" CTX 1451 NI (1024x768) ..... +$25
14" CTX 1461(NI), 72Hz Ref (1024x768) $60
15" CTX/MAG 15H/infiniti ..... SPECIAL
17" VIEWSONIC 17 .27mm NI (1600x1280@NI) ..... GREAT $
17" VIEWSONIC 17G .28mm NI (1280x1024@NI) ... GREAT $
"GREEN" POWER MANAGEMENT, ON-SCREEN MENUS.
17" MAG/CTX NI (1280X1024) ..... GREAT $
FULL TOWER w/2 FANS ..... +$40

EISA-VESA 486DX SYSTEMS
Unleash the power "VESA-EISA" 32Bit System

- TYAN EISA/VESA LB M/B
- 8 EISA SLOTS/3 VESA SLOTS
- ZIF PENTIUM SOCKET
- 256K CACHE MEMORY
- 16MB RAM (32-BIT MEMORY)
- CPU COOLING FAN & HEAT SINK
- TEAC 1.2MB & 1.44MB DUAL FDD
- 340MB SCSI HARD DRIVE
- ADAPTEC 2742 32 BIT EISA SCSI II CONTROLLER
- DIAMOND STEALTH 24 VLB 1MB VRAM
- 15" SVGA MTR 1280X1024 .27 D.P. NI VIEWSONIC 15
- 2 HI-SPEED SERIAL, 1PARALLEL PORT
- FULL TOWER CASE W/2 FANS
- 250WATTS POWER SUPPLY
- KEYTRONICS KT-2000 ENHANCED K/B

ASEAN EISA 486DX-33/DX2-50MHz ..... call
ASEAN EISA 486DX-66MHz ..... call

WE DO CUSTOMIZED CONFIGURATIONS

WHOLESALE $$ TO THE PUBLIC
ASEAN HIGH PERFORMANCE SYSTEMS ARE PRE-TESTED A MINIMUM OF 72 HRS TO ENSURE MAXIMUM QUALITY AND RELIABILITY

ORDER HOTLINE
sales: (909) 598 2828
fax: (909) 598 5748

GOVERNMENT & UNIVERSITY PO'S & CORPORATE ACCTS. WELCOME

INTEL 586DX-66 PCI PENTIUM VESA LOCAL BUS

- 586 VESA LB/PCI MB, ZIF PENTIUM SOCKET
- INTEL 586DX-66 CPU w/HEAT SINK & FAN
- 256K CACHE MEMORY
- 16MB RAM
- TEAC 1.2MB & 1.44MB FDD
- 530MB SCSI-II HARD DRIVE
- 32-BIT VLB SCSI-II CTRL ADAPTEC 2842VL
- DIAMOND VIPER VLB/PCI 2MB VRAM
- VIEWSONIC 17G 1280X1024 .28 D.P. NI
- 2 HI-SPEED SERIAL, 1 PARALLEL
- FULL TOWER CASE W/2 FANS (250W P/S)
- KEYTRONIC KT-2000 101-KEY ENH. K/B
- MICROSOFT SERIAL MOUSE

SPECIAL $$$

ACTi 386SX & 386DX & IBM VLB SLC SYSTEMS

ACTi 386SX40 SYSTEM

- 386 SX40 M/B w/2MB (EXP. TO 16MB)
- MINI TOWER W/P.S.
- 101 ENHANCED K/B
- 14" VGA MT (640X480) w/256K VGA
- IDE CTRL & 2S/P/GAME
- 170MB IDE HD
- 3.5" 1.44MB FD
- HI-RES MOUSE (MS COMPATIBLE)

$620

ACTi 386DX40 SYSTEM

- 386 DX40 M/B (128K C) w/4MB RAM
- MINI TOWER W/P.S.
- 101 ENHANCED K/B
- 14"SVGA MT (.28 1024x768) w/512K SVGA
- IDE CTRL & 2S/P/GAME
- 170MB IDE HD
- 1.2MB & 1.44MB FD
- HI-RES MOUSE (MS COMPATIBLE)

$790

IBM 486SLC-66 VLB SYSTEM

- VLB IBM M/B w/MATH-CO, 4MB RAM
- MINI TOWER W/P.S.
- 101 ENHANCED K/B
- 14"SVGA MONITOR (.28 1024x768)
- VLB 32BIT ACCL. SVGA CARD w/1MB
- VLB IDE CTRL & 2S/P/GAME
- 210MB IDE HD
- 1.2MB & 1.44MB FD
- HI-RES MOUSE (MS COMPATIBLE)

$1050

861 9405A

ASEAN COMPUTER TECHNOLOGIES
INCORPORATED

971 Fairway Drive, Walnut, CA 91789

FAX: (909) 598 5748

ORDER HOTLINE
(909) 598 2828

TECH SUPPORT
(909) 598 5498

ViewSonic® 21"

VIEWSONIC BIG SCREEN SPOTLIGHT
"3 YRS" WARRANTY

MICROPROCESSOR BASED, DIGITALLY CONTROLLED MONITOR - 21" VIEWSONIC 21:

- Autosizing, Auto-synchronizing
- Intelligent mode switching
- .25mm, 1600x1280, Non-Interlaced
- Low Radiation
- MACINTOSH compatible

in stock $1700

15" Viewsonic 15E/15	$355/420
17" Viewsonic 17G/17	Special
20" Viewsonic 20	$1455

MONTHLY HD SPECIALS

CONNER/W. DIGITAL 210MB IDE HDD	$190/192
SAMSUNG 3172A IDE HDD	$240
• 366MB, 2year warranty	
CONNER/W. DIGITAL 420MB IDE HDD	$278
W. DIGITAL 540MB IDE HDD	$388
QUANTUM 530MB SCSI HDD	$438
QUANTUM 1.08GIG SCSI HDD	$728
QUANTUM 1.8GIG SCSI	$1,050

ALL SPECIALS - LIMITED SUPPLY

586DX-60
PENTIUM VESA LOCAL BUS

- 586 VESA LB M/B HOT 503 OPTI
- INTEL 586DX-60 CPU
- ZIF PENTIUM SOCKET
- 512K CACHE MEMORY
- 16MB RAM (32-BIT MEMORY)
- CPU COOLING FAN & HEAT SINK
- TEAC 1.2MB & 1.44MB DUAL FDD
- 530MB SCSI HARD DRIVE
- 32 BIT VLB SCSI II CONTROLLER ADAPTEC 2842VL
- DIAMOND VIPER VLB 2MB VRAM
- VIEWSONIC 17G 1280X1024 .28 D.P. NI
- 2 HI-SPEED SERIAL, 1PARALLEL
- FULL TOWER CASE W/ 2 FANS
- 250WATTS POWER SUPPLY
- KEYTRONICS KT-2000 ENHANCED K/B
- MICROSOFT SERIAL MOUSE

SPECIAL $$$ CALL

9405B

CASES W/P.S.

Enhance Desktop w/230W p.s. 6.5"x16.75"x17.25"	$40
Black Enhance Desktop w/200Wp.s. & dig. disp.	$65
Mini Tower w/200W (special) w/230 p.s. 13"x16"x7.25"	$36/40
Black Mini Tower w/230Wp.s. & dig. display	$55
Med. Tower w/230W p.s. & dig. display 6.5"x16.75"x17.25" (BLACK MED)	$58 $80
Full Tower w/250W p.s. & dig. display 24.5"x17"x7.5"	$72
Full Tower w/250W p.s. & dig. disp. w/2 fans	$80
Black Full Tower w/250Wp.s. & dig. display	$105
Slim Line Case w/230Wp.s.	$75
Multimedia Case (2x20W Speakers) Desktop w/PS	$00
Super Tower (File Server)	$185
2 fans + 10 bays w/300W p.s. w/wheels	

VIDEO DISPLAY

ACTi 16bit w/256K 800x600	$28
AVGA-3 1MB Graphics Acc./Truecolor	$55/68
TVGA-8000 VGA Card w/Trident 8000 Chipset, 512K	$40
TVGA-8900 SuperVGA Card w/Trident 8900 Chipset	$58
Cirrus Logic GD5424 1MB VLB Accelerator	$75
Cirrus Logic GD5426 1MB VLB Accelerator	$85
PVGA Graphics Accelerator w/1MB w/Hi-Color Chip (WD chipset) Paradise compatib.	$90
ATi Ultra Plus (1280x1024, 2MB Dram)	$240
ATi Ultra Pro (1280x1024) 1280x1024 Non-Interlaced, 2MB VRam	$340
EISA ATi Ultra Pro (1280x1024) 1280x1024 Non-Interlaced, 2MB VRam	$430
Diamond SpeedStar-24X 1MB VGA Card (16 mil. colors)	$165
Diamond SpeedStar Pro VLB 1MB Accelerator	$120
Diamond Stealth 1MB (24x) Windows Accelerator	$160
Diamond Stealth 24 VLB 1MB Accelerator	$140
Diamond Stealth Pro VLB 1MB Accelerator	$245
Diamond Stealth Pro VLB 2MB Accelerator	$320
Diamond Stealth 32 PCI w/2MB	$250
Diamond Viper VLB 2MB VRAM Accelerator	$350
Diamond Viper PCI 2MB VRAM Accelerator	$395
OAK 087 1MB Accelerator	$58
Orchid Fahrenheit Windows Accelerator 24Bit, 16.7 mil. colors w/1MB	$160
Orchid Fahrenheit VLB Win accelerator 1MB	$145
S3/805 VLB 1MB Accelerator (2MB exp.) *special*	$98
Mono Graphic w/Printer port	$15

MODEMS + TAPE BACK-UP

Conner Tape Back-up 250MB w/1 cartridge	$140
Colorado Tape Back-up 120MB	$115
Colorado Tape Back-up 250MB	$160
Jumbo Tracker JT10 120MB Colorado parallel port Tape Back-up	$300
Jumbo Tracker JT20 250MB Colorado parallel port Tape Back-up	$355
External Drive Kit KE-09 (no adapter)	$80
Tape Drive Adapter AB-11 (for ext.)	$40
FC-10 500Kb/s-1Mb/s Adapter Kit	$90
TC-15 Data Compression Adapter Kit	$189
Tape Back-up Cartridge 120/250MB	$20/22
9600/4800 Fax/Modem w/MNP7	$35
14 400 Modem int w/v.32/v.42 w/Fax	$90
Super Fax - Windows software	$10
U.S. Robotics Sportster Modems	
9600PC Internal Data Modem	$130
9600 External Data Modem	$150
14400 Internal Data/Fax Modem	$159
14400 External Data/Fax Modem	$169

MOTHERBOARDS

286-12Mhz/286-20Mhz	$35/55
386-SX33/SX40Mhz	$59/65
386-DX25 w/o CPU, w/CPU OPTI	$75/115
386-33 128K cache w/o CPU: w/CPU OPTI	$75/125
386-40 128K cache w/o CPU: w/CPU OPTI	$75/110
386-40 128K cache w/o CPU: w/CPU ACTi	$70/100
486SX-25 128K cache w/o CPU: w/CPU OPTi	$90/168
486DX 128K cache w/o CPU, OPTi	$95
Cyrix 486DLC-33/40 128K cache w/CPU & Math Co...	call

VESA Local Bus M/B w/o CPU:

IBM VLB 486SLC2-66 *SPECIAL* w/CPU & Math Co.	$298
OPTi 486 VLB w/256K Cache w/P24 socket	$95
OPTi 486 VLB w/256K Cache w/3 VLB slots & Bus Mastering, ZIF socket	$100
VEGA 486 VLB w/256 cache (USA made) w/3 VLB slots & Bus Mastering, ZIF socket	$170
New 386/486 upgradeable VLB M/B 256K cache takes 386DX CPU / 486 CPU's	call

SPECIAL

VLB486SX-25 128K cache w/CPU OPTi	$178
VLB486DX-33 256K cache w/DX33 CPU	call
VLB486DX2-50 256K cache w/DX2-50 CPU	call
VLB486DX2-66 256K cache w/DX2-66 CPU	call

EISA/VESA Local Bus M/B w/o CPU, 0K Memory:

OPTi 486 EISA w/256K cache (8 EISA slots)	$250
VEGA 486 EISA w/256 cache (USA made)	$365
OPTi 486 EISA-VLB w/256K cache w/ZIF socket	call
HINT 486DX-33/50/66 EISA-VESA w/256K w/ZIF Socket (3EISA, 2VLB, Pentium overdrive)	call
TYAN 486DX-33/50/66 EISA-VESA w/256K w/ZIF Socket (3 EISA, 2 VLB, US Made, cache 1MB upgradeable)	$290
Pentium 586 Motherboard VLB+PCI	call

H/F CONTROLLERS

VLB IDE + I/O 2S/PG (VESA)	$25
IDE + I/O 2S/P/G (ISA)	$18
IDE 1:1 2H/2F Ctrl (Qty 20+ $9)	$15
IDE 1:1 2H/4F Ctrl I-40	$35
IDE 1:1 2H/2F Ctrl w/ROM (for Networks)	$45
Super IDE 2H/2F w/AT I/O (Qty 20+ $11)	$20
VESA LB Super IDE ctrl w/I/O (2H/2F, 2s.p.g)	$25
ADAPTEC SCSI 1522/1522K	$100/140
ADAPTEC SCSI 1542CK/1542CK+	$240/310
ADAPTEC SCSI 2742T EISA Ctrl.	$290
ADAPTEC SCSI 2742A EISA Bus Master. w/Kit	$360
ADAPTEC 2842 VLB SCSI H/F Ctrl w/kit	$285
Bus Logic KT445S VLB SCSI Cntr. Kit	$280
Bus Logic KT642B ISA SCSI Cntr. Kit	$280
DTC 2290 EISA IDE Ctrl 4HD/4FD. 8MB/sec	$120
DTC 3270 VLB SCSI-2 Ctrl	$130
DTC 3290AS EISA to SCSI Cache Ctrl. ASPI comp., Host adapter, (4MB exp.)	$395
DTC 3292 EISA SCSI Ctrl (non-cache).	$330
LCS EISA IDE Ctrl w/1MB Cache (16MB exp.)	call
Promise ISA IDE w/512K (exp. 8,5MB)	$150
Promise 4030VLB IDE Cache Ctrl (exp.16MB)	$140
Promise 420 VLB IDE w/AT I/O w/512K	$150
Tekram DC-680 VLB IDE Ctrl. (exp. 16MB)	$155
UltraStor 14F SCSI FD/HD Ctrl.	$220
UltraStor 24F EISA SCSI FD/HD Ctrl.	$350
UltraStor 34F VESA Local Bus SCSI FD/HD Ctrl.	$275

I/O CARDS

AT I/O (2S/P/G) (Qty 20+ $8.50)	$13
High Speed AT I/O (Qty 20+ $32) (16C550 comp., 2 serial/1 parallel ports)	$38
Super IDE 2H/2F w/AT I/O (Qty 20+ $11)	$18
VESA LB Super IDE ctrl. w/I/O (2H/2F, 2s.p.g)	$25
Printer card/Game card	$9/9

KEYBOARDS

BTC 101 Enhance 5339	$25
Lite-On 101	$35
Keytronic 101 KT2000 (USA)	$35
Fujitsu 4700 101	$45
Focus 2001 w/Dust Cover	$35
F8000 111 Keys w/Calculator (soft)	$45
Focus 9000 128 Keys w/Calculator	$58
BLACK ACTi 101 Enh. k/b	$42
BLACK Focus 2001 101 Enh. k/b	$40

MONITORS
Authorized Viewsonic Dealer

12" Mono Monitor (Amber)	$75
14" Mono Monitor (P.W.)	$85
14" Mono VGA (P.W.)	$100
14" MQ VGA (I) (640x480, .42)	$170
14" CTX 3468/Arcus SVGA (.28mm 1024x768)	$255
14" Black Arcus SVGA Int. (.28mm)	$275
14" CTX 3468 NI/Arcus 1448 SVGA Multisync	$280
14" CTX 1451 NI (1024x768, .28mm)	$255
14" CTX 1461 NI (1024x768, .28mm, 72Hz)	$275
14" Black Arcus NI (.28) 1024x768 Multisync	$300
14" Infiniti 1439 / Sunshine 7A SVGA (.39mm 1024x768)	$190
14" MQ 1450I SVGA (.28mm 1024x768)	$225
14" Infiniti M4/Sunshine8 SVGA *SPECIAL* Non-Interlace (.28mm 1024x768)	$240
15" CTX 1561NI (1024x768, .28mm.)	$360
15" Infiniti 15 NI Multisync FS (.28mm 1024x768)	$299
15" Infiniti 15 NI Multisync FS (.28mm 1280x1024) Microprocessor ctrl	$365
15" MAG DX-15F/MX-15F	$408/455
17" MAG DX-17F/MX-17F	$780/$850
17" CTX 1760 (.28mm NI, 1280x1024)	$650
17" Mitac MTC731 Non-Interlace (.31mm 1024x768)	$560
15" NEC 4FGE/ 17" NEC 5FGE (.28 mm multiple frequency)	$725/1120

ViewSonic®

14E 14" SVGA (.28dp, 1024X768@NI)	$300
6E 14" SVGA NI (.28dp, 1024x768)	$275
15 15" SVGA NI (.28dp, Digital, 76Hz)	$435
15E 15" SVGA NI (.28dp, Flat screen, 76Hz)	call
17 17" SVGA NI (.27dp Digital, 76Hz, 1600X1280)	call
17G 17" SVGA NI (Multi-Freq, 28dp, 1280x1024)	call
20 20" SVGA NI (.28dp, Dig., 76Hz)	$1455
21 21" SVGA NI (.28dp, Dig., 76Hz)	$1750

"BLACK" components available

Arcus 14" (I) & (NI) monitors
Teac Floppies
Teac Dualspeed SCSI CD-ROM
Keyboard, Mouse, Cases

CD ROM & ACCESSORIES

BEST BUY Panasonic 562 w/interface	CALL
64K cache dual speed, 315ms, 150/300KB/sek. Multisession/Kodak PhotoCD ready. *SPECIAL*	
NEC CD 74 Ext. SCSI/84 Int. SCSI (280ms)	$350/288
Toshiba CD 340 1B Internal SCSI CD-ROM	$325
Toshiba CD 340 1B Int. SCSI CD-ROM w/Interf. Fully integrated Audio, Double-speed, MPC compliant. Multi-Session Kodak Photo CD compliant, SCSI-2	$415
Creative Lab Sound Blaster Pro Deluxe	$148
Creative Lab Sound Blaster 16/ASP	$178/230
Media Vision Pro Jazz 16 Sound Card	$115
NEC 610 SCSI Triple Speed CD-ROM	$355
Teac Dual Speed SCSI CD-ROM (Black face)	$350

MICE & TRACKBALLS

Leadgen Hi-res Mouse (Serial) CP3 NX	$10
Truemouse TX/AX 300 (Serial) w/mouse pad	$20
Truemouse TX/AX 300A (Ser.) w/mouse pad	$15
Truedox Trackball TR300	$35
Logitech Dexxa Mouse	$22
Logitech MouseMan	$66
Logitech TrackMan II (Serial)	$78
Logitech TrackMan Portable	$105
Genius Portable Trackman	call
Microsoft Mouse Serial/Bus	$65/75
BLACKA-Tech (Serial) Hi-res Mouse	$22

HARD DISKS/FLOPPY DRIVES

CONNER 30084 80MB IDE (17ms)	N/A
CONNER 30174 170MB IDE (17ms)	$182
CONNER 30204 210MB IDE (12ms)	$198
CONNER 30254 251MB IDE (14ms)	$220
CONNER 340MB IDE	$260
CONNER 420MB IDE	$280
CONNER 30544 540MB IDE (10ms)	$400
CONNER 30540 540MB SCSI-2 (10ms)	$488
CONNER 1.08GIG SCSI-II	$740
FUJITSU 2624T 513MB IDE (10ms) 5 yr. warr.	$565
FUJITSU 2624FA 513MB SCSI (12ms) 5 yr. warr.	$585
FUJITSU M2266SA 1.2GB SCSI (14ms) 5 yr. warr.	call
FUJITSU M2652SA 2.0GB SCSI (11ms) 5 yr. warr.	call
MAXTOR 7120A 120MB IDE (15ms)	$175
MAXTOR 7213A 210MB IDE (15ms)	$215
MAXTOR 213S 213MB SCSI (15ms)	$260
MAXTOR 7245A 245MB IDE (14ms)	$235
MAXTOR 340A 340MB IDE (13ms)	call
MAXTOR 340S 337MB SCSI (13ms)	$370
MAXTOR 534A 535MB IDE (13ms)	$415
QUANTUM LPS 170MB IDE (15ms)	$190
QUANTUM Q24A012 240MB IDE (13ms)	call
QUANTUM 530MB IDE	$400
QUANTUM 530MB SCSI	$458
QUANTUM 1.08GB/1.80GB SCSI	call
WESTERN DIG 2200 210MB IDE (15ms)	call
WESTERN DIG 2250 250MB IDE (13ms)	call
WESTERN DIG 340MB IDE (12ms)	$265
WESTERN DIG 420MB IDE	$285
WESTERN DIG 540MB IDE	$405
SAMSUNG 170MB IDE	$180
SAMSUNG 250MB IDE	$198
SAMSUNG 350MB IDE	$248
Samsung 1.2/1.44MB	$45/40
Teac 1.2/1.44 (Black available call)	$50/48
1.44 with kit add	$3
FD505 Teac 2 in 1 1.2+1.44MB FDD	$105
BD800 Epson 2 in 1 1.2+1.44MB FDD	$88

Minimum order $300 or Qty 10+. Call for Dealer Qty Discounts and other products (Printers, RAM, P.S.) prices.

Best Buy

TERMS: 1year warranty on parts & labor. Printers & monitors warranty thru manufacturer. All sales on CHIPS, MONITORS & PRINTERS are final. NO REFUND! All returns are subjected to our approval & must have prior authorization. Return items must be in good condition & in its original packing shipped prepaid & insured. All refunds or credits are less freight & bank charges. All refund items must be returned within 14 days of invoice. There will be a restocking charge of 20% after the 7 days period & within 14 days of invoice. Not responsible for any typographical errors. Price & availability subject to change without any notice. Prices are COD cash/cashiers chk.

Multi Media & beyond

CD-ROM: Amiga Style

BY DOUGLAS J. NAKAKIHARA

The personal computer world has gone CD-ROM crazy, a fact I hadn't realized until a recent visit to a local computer swap meet. There were numerous vendors with tables and tables of CD software. More importantly, there were swarms of eager buyers snatching up the disks.

Of course most of these titles were meant for IBM PC compatibles and a few for the Macintosh.

Fortunately, many of the titles will work fine on a CD-ROM-equipped Amiga, for reasons I'll explain later. Although PC- or Mac-executable programs will generally be useless on an Amiga, disks that contain mostly data files, like PostScript fonts, clipart, graphics, and audio clips can be very valuable to Amiga users. You'll have to use image processors or other utilities to convert them into a usable Amiga format, but that isn't very difficult. Additionally, there are a number of Amiga-specific CDs available.

There is tremendous competition among CD-ROM manufacturers and retailers, which can cause confusion for the potential buyer. The following information is intended to help clear things up and show you how easy it is to add a CD-ROM drive to an Amiga. In some instances, you may not even have to open your computer case.

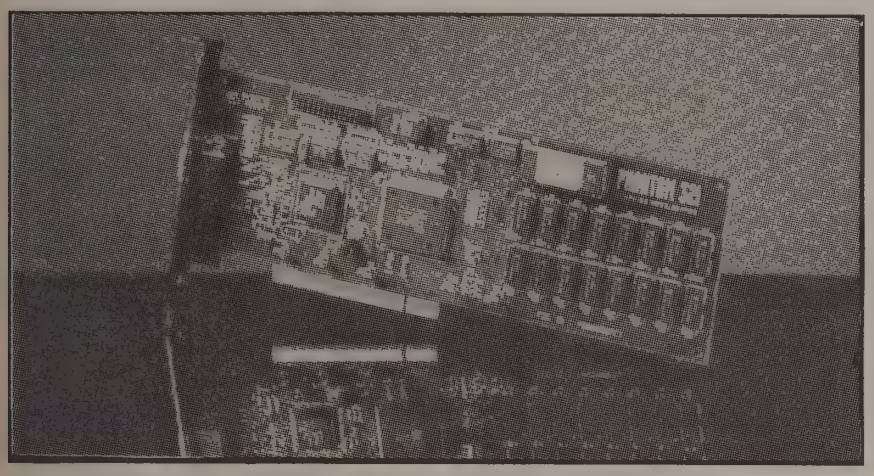
INTERFACE

Generally, CD-ROM drives can be differentiated based on interface, transfer rate, access time, and features. SCSI is the interface of choice for the Amiga. If you already have a SCSI interface card, you're halfway there. If you don't, you'll have to purchase one.

For slot-bearing Amigas, there are numerous choices. Several manufacturers offer expansion cards that take advantage of the higher transfer rate of the Zorro III bus used in the A4000 and A3000. This is normally only an issue for the 4000, since the 3000 already has a fast built-in SCSI interface. Of course, a Zorro II board will work fine in a 4000, but the performance will be less than optimum.

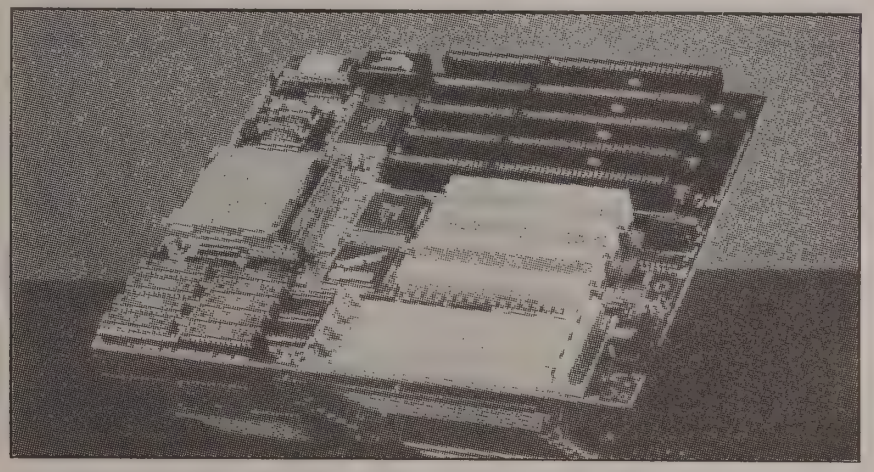
Copyright © 1994 by Douglas J. Nakakihara. All rights reserved.

ABC Carries All the Brand Name Products and Services for VAR Partners



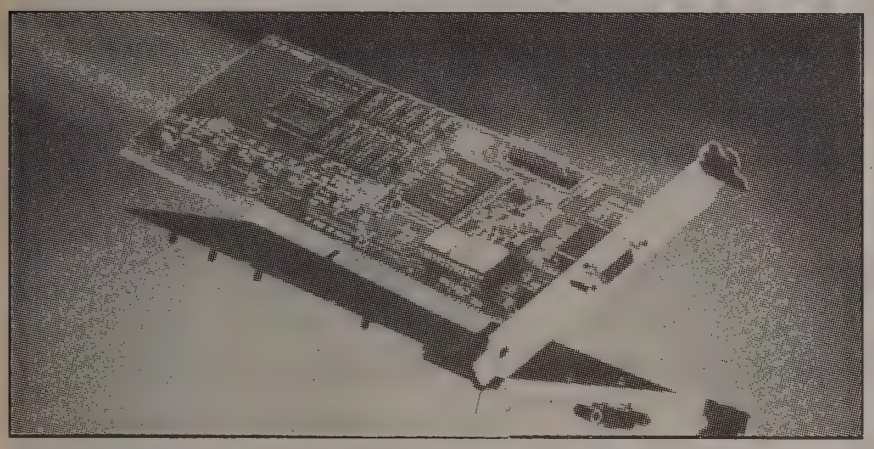
Genoa SYSTEMS CORPORATION **PHANTOM 32i**

This 8900 Series Graphics Accelerator offers high performance and PCI or VL-Bus technology for today's leading-edge CAD, DTP, and multimedia applications. It features interleaving technology and FlickerFree™ reso-lutions. FlickerFree™ offers up to 114Hz vertical refresh rates for VGA resolutions on multi-frequency or analog monitors.



Genoa SYSTEMS CORPORATION **TurboExpress™ PCI**

This 3/4 Baby AT motherboard series is the ultimate Windows & OS/2 engine for the PCI platform. They utilize Intel Saturn chipsets and support 25/33MHz 486DX, 486SX; 25/33MHz OverDrive: 50/66MHz 486DX2; and Pentium OverDrive. 256KB of external cache memory is standard (upgradeable to 512KB). They feature 4 PCI slots (2 masters) and 5 16-bit ISA slots.



Genoa SYSTEMS CORPORATION **WindowsVGA™ 24**

This Turbo Series VESA local bus graphics accelerator features FlickerFree™ resolutions and display memory upgradable to 2MB (socket provided). FlickerFree™ provides up to 114Hz verticle refresh rates on multi-frequency or analog monitors.

We offer components at very competitive prices. We at EKM are one of the few computer wholesalers who offer up-to-date pricing with an experienced sales staff who know the hardware and market in which they sell.

At EKM, we know that giving you the latest information on products and pricing gives you a distinct advantage over your competitors. To better serve our customers, we continually add additional talented staff as conditions require. This has given us one of the strongest RMA departments in the business. Our technical support–when combined with our business experience, company stability, and competitive pricing–puts us well on our way to achieving our goal of satisfying you, the customer.

WindowsVGA 24 June 1993

WindowsVGA 24 July 1993

WindowsVGA May 1992

PC WORLD Recommended Buy WindowsVGA 24 October 1993

WindowsVGA 24 August 1993

Sales Only: 1-800-889-8836

ABC®

FOR WINDOWS/NT, DOS, & OS/2!

Genoa SYSTEMS CORPORATION

EKM Computer Inc.

6735 Knott Avenue•Buena Park, CA 90620 • Tel:(714) 521-9898•Fax:(714)521-6868

All logos, products, brand names are trademarks or registered trademarks of their respective companies and/or manufacturers.

You may run into a little problem, however: some early A4000s (and all A3000s) have a problem with the Buster chip, which prevents taking full advantage of the Zorro III bus. The Buster chip needs to have a part number with a revision of greater than -09. If your Buster chip is socketed, a simple chip change will do the trick. Otherwise, a motherboard swap is required. Note: Some A4000 accelerator cards have a SCSI interface which bypasses the bus and avoids the Buster problem.

All of the Zorro III cards support the higher performance of the SCSI II standard. You'll have to check the specs of Zorro II boards to see if they do. If your interface supports SCSI II, make sure that the CD-ROM you purchase does as well—most of the newer drives do.

TRANSFER RATE

Originally, CD-ROMs only read data at a rate of 150kps (kilobytes per second). Since then, double-speed, triple-speed, and even quad-speed drives have doubled, tripled, and quadrupled this capability.

Single-speed SCSI drives have all but disappeared, and double-speed drives have become the de facto standard—as least for this week. The price of these drives has fallen to under $300, and I have seen some close-outs near $200! Triple-speed drives are around $500, and quad-speed drives cost about a grand. Obviously, double-speed drives present the most economical buy.

ACCESS TIME

Just like a hard drive, CD-ROMs also differ by access time, that is, the average time it takes the drive to access data. When comparing drives you should note this number when making your decision. However, remember too that this is an average, and minor differences between product specifications may not be significant in real-world operation.

FEATURES

All CD-ROMs share the same basic features; however, there are some features you should investigate, namely XA support and multisession capability. You'll see terms like "XA-ready," "XA-compliant," and even "XA-ready compliant." Suffice it to say that these describe a drive's ability to deliver audio and graphics simultaneously to a particular standard. For all practical purposes, it means the drive can read Kodak PhotoCDs. However, XA is also needed for the upcoming VideoCDs.

PhotoCDs are created using everyday photographic film, as an alternative to standard prints. So far there are very few places in my area where you can have this done. Multisession capability involves special writable CDs that can be reprocessed with additional PhotoCD images. Kodak made some special PhotoCD players, but the format has become much more popu-

BAR CODE IS OUR SPECIALTY

INPUT AUTOMATION, INC.

The single source for all your bar code system needs: hardware, software, consulting and system design. Our philosophy is based on two principles: high-quality industrial products, and the best technical support available.

DESIGN AND CONSULTING

To create your optimal solution, an Input Automation consultant will design a complete system, and then recommend equipment that fills your exact needs.

We will not be satisfied until our bar code system meets your demanding standards.

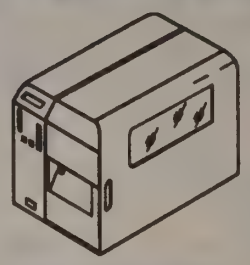
Call today for free info.& product information

(Dealer inquiries welcome)

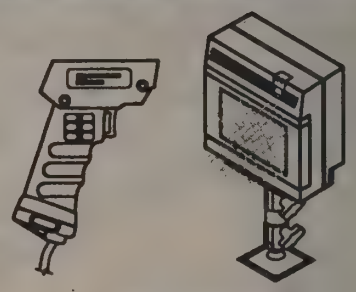
Call for an appointment to see our Showroom

Southern California
Tel: (310) 539-3598
Fax: (310) 530-2849
Tel: (714) 374-4511

Northern California
Tel: (510) 685-6563
Fax: (510) 685-2513

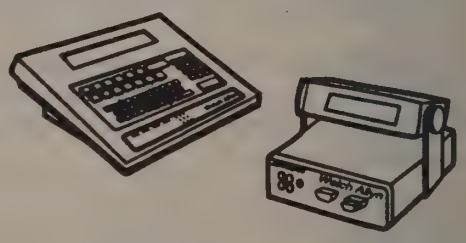


Bar Code Label Printers, Software, and Supplies



Laser Scanners. Omnidirectional, hand-held/hands-free, fixed mount.

Portable Data Collection Terminals



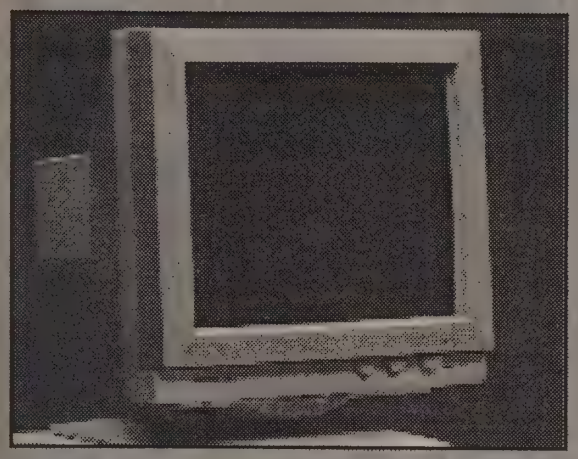
Welch Allyn bar code readers/scanners. Over 15 years leadership in bar code manufacturing.

INPUT automation, inc.
Authorized Value-Added Distributor

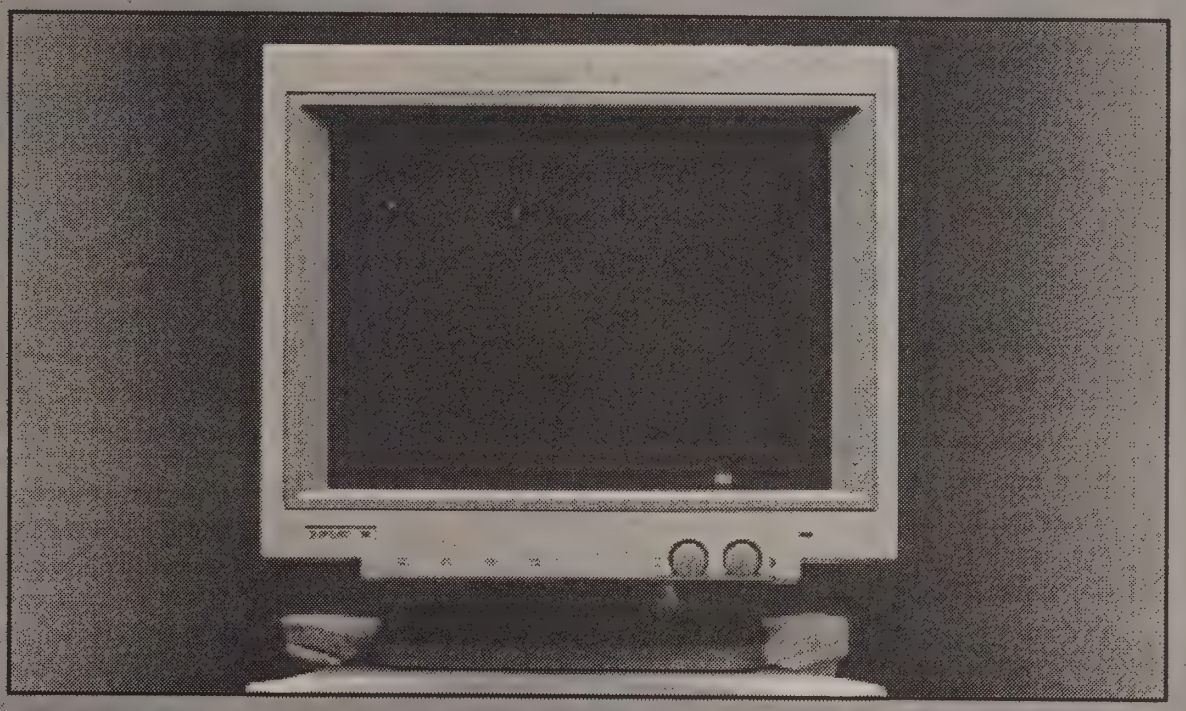
Visa & M/C Accepted

© 1992 Copyright Input Automation, Inc. All rights reserved. All product names mentioned are trademarks of their respective manufacturers. Input Automation, Inc. recognizes these trademarks

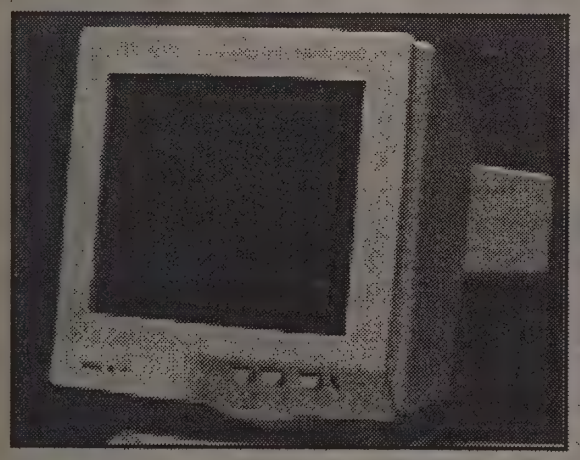
WE STAND BY OUR PRODUCT



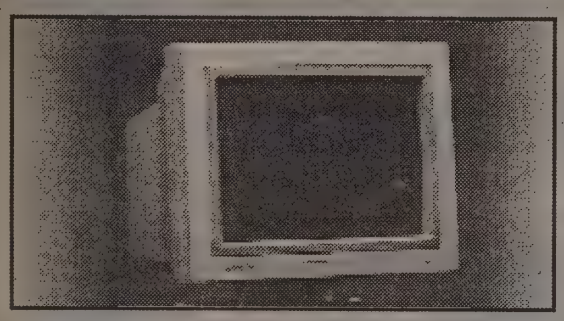
14" VGA Monochrome SM-1416



15" Multisynchrone ST-1592



14" Super VGA Monochrome SM-1418



14" Multisynchrone
SV-1486/1487, ST-1496

17" Multisynchrone ST-1792

- *1-Year Replacement Warranty*
- *2-Year Parts Warranty*

"We Are Ready To Set The Standard"

SUPERCOM
MULTISYSTEMS

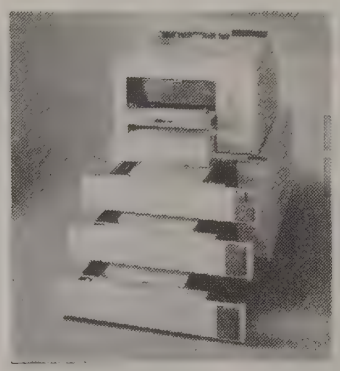
10881 Business Drive, Fontana, CA 92337

(909) 357-6866

* "Green" Monitors Available Soon

Envelope and Paper Handling Accessories for your Laser Printer

EIT Laser Tower



- From 2 to 7 paper trays
- 500 page capacity per cassette
- Select any cassette from your PC
- Automatic envelope addressing
- Works with over 25 printer models

Other Available Accessories
High capcity paper feeders
High capacity envelope feeders *
Multi bin feeders *
Stackers
Collators
Folders

Special Offer!

H.P. LaserJet IV	$1200*
H.P. LaserJet IV M	$1675*
H.P. LaserJet IVsi	$2725*
H.P. LaserJet IVsi MX	$4050*

* When purchased with any P.C.T. multi bin or high capacity envelope feeder for the printers above.

P. C. T.
26071 Merit Circle Ste. 108
Laguna Hills, CA 92653
Phone: (800) 773-7281

Commercial Leasing Available

Prices and specifications subject to change.

COMPUTER LIQUIDATION CENTER

WHOLESALE
UP TO 75% OFF SUGGESTED RETAIL

UP TO 75% OFF SUGGESTED RETAIL

AST® COMPUTERS
NOTEBOOKS

PREMIUM EXC REFURBISHED 386SX/20:
2 Meg RAM, 60 Meg HD, DOS, Windows, Carrying Case, 90 DAYS CLC WARRANTY $795

386SX/25:
4 Meg RAM, 80 Meg HD, DOS, Windows, Carrying Case, 90 DAYS CLC WARRANTY $975

386SX/25C PASSIVE COLOR:
4 Meg RAM, 80 Meg HD, DOS, Windows, Carrying Case, 90 DAYS CLC WARRANTY $1095

POWER EXC 3/25SLC MODEL 163/4 COLOR NOTEBOOK:
160 Meg HD, 4 Meg RAM, 1.44 Floppy 90 Days Warranty $1595

PEN EXC 3/25SL:
200MB HD, 1.44 Floppy, 4 Meg RAM, DOS & Windows $1295

AST NOTEBOOK PARTS

80MB Premium Exc/Power Exc	$155/$175
120MB Premium Exc/Power Exc	$275/$295
200MB Premium Exc/Power Exc	$375/$395
1 Meg RAM P/N 202298	$45
4 Meg RAM For Premium Exc	$195
4 Meg RAM For Power Exc	$245
4 Meg RAM For Desktop	$195
Keyboard Desktop/Notebook	$25
Battery Pack Premium Exc/Power Exc	$45/$65
AC Adapter	$45
External Battery Charger	$35
AC Adapter For Car	$35
Trackball For Power Exc	$45
Data Modem - Premium Exc	$50
Data Fax/Modem S/R For Premium Exc - Bulk	$125

SPECIAL!
BLOWOUT SCANNERS
DEXXA/LOGITECH SCANNERS
Up to 256 Grey Scale Through Software
4 Inch Wide, 400 DPI
Includes: Grey Touch & Fotoptouch
Supports DOS & Windows
ONLY $59.95

MISCELLANEOUS

Large Tablet - Drawing IS/3 42x6 For Macintosh	$995
Carrying Case For Notebook Nylon	$30
Leather	$55
SCSI 1050 1 GB Hard Disk	$725
ESDI 320MB Ref. FH	$175
Archive SCSI 500MB Tape Backup Model 2525S	$195

DEALERS : Qty. 50+

Toshiba 1.44 Floppy Drive Includes Installation Kit	$23

LOGITECH PRODUCTS

DEALERS:	Qty. 10+	Qty. 100+
400dpi Mouse - MD14 2 Button Curve	$12	$9.95
400dpi Mouse - MD15 3 Button Curve	$15	$11.95
Trackman Portable, Serial	$25	$19
PS2 Mouse - 400dpi Retail Box	$25	$18

END USERS:

Trackball Stationary	$55
Trackball Portable	$25
Logitech First Mouse	$35

Scanman Model 256 True 256 Gray Scale Scanner For Windows
INCLUDES:

Catchword Pro OCR & Auto Stitch	$133.95
Scanman Color w/Photomagic, Auto Stitch	$295
Scanman Color w/Photomagic, Auto Stitch And Catchword Pro OCR	$395
Fotoman Plus	$395

To Order, Please CALL at Advantos. We Accept Will Call Only. We Will Gladly Ship All Orders To You. Thank You!

(714) 895-5802
FAX: (714) 897-9498

HOURS:
M-F 9 a.m. to 5 p.m.
Some Sat. 9:00 a.m. to 3p.m.
And @ the Computer Swapmeet nearest you!
Prices & Availability Subject To Change.

YOUR #1 AST SPARE PARTS DISTRIBUTOR IN SOUTHERN CALIFORNIA

MultiMedia & beyond

vides a really inexpensive way to store high-quality digitized images on CD-ROM.

GETTING THE DISH IN

People sometimes forget to consider the way the disk loads into the drive. Most drives use a special cartridge called a "caddy" that holds a CD and is inserted into the drive. Using caddies can become tedious if you swap disks a lot. You can purchase additional caddies, but that represents an added expense.

On the plus side, a caddy provides protection for the CD when it's not inserted into the drive. Moreover, the new NEC 3X models, which use caddies, allow the drive to be mounted vertically. This may be a factor for Amiga 2000 and 4000 owners who want an internal drive, but like to set the computer case on its side.

The alternatives are top-loading or drawer-type models, which offer greater convenience over caddy-using drives. Note that the drawer-types may cost a little more and be subject to a greater number of mechanical problems.

INSIDE/OUTSIDE

External CD-ROM drives are often internal units mounted in a standard external peripheral box; however, some companies manufacture specific external models with a top-loading case. External models are nice because they are portable and don't tax your computer's power supply, but they do take up additional desktop real estate. If you've got a 5 1/4" drive bay available, I'd suggest going with an internal model, since you'll avoid the cost of the box and power supply.

HOOK ME UP

Physical connection is also important. SCSI uses no less than three different types of connectors. Make sure you know what type of connectors you have when purchasing your drive, so you can get the correct cabling.

SCSI also has a weird thing called termination—there should be a terminator after the last internal and external SCSI devices. This is usually set using resistor packs, a jumper, or a switch right on the drive. For external drives you can use a terminator plug that connects to the pass-thru SCSI port. I like the plugs because I don't have to worry about opening up boxes should I ever need to add or remove SCSI devices. All drives don't have pass-thrus, but this can be added with an adapter.

CD FILE SYSTEM

Once you've got the CD-ROM connected to your Amiga, you need file system software that will allow you to read a CD. (Note: CD-ROM support will reportedly be a part of AmigaDOS 3.1.) Fortunately, there are

MULTIMEDIA

Solutions that solve your worst problems or just make life easier.

Kiosk Systems

- ❑ Information
- ❑ Sales
- ❑ Communications

Computer based Training Systems.

- ❑ Self-guided training for new employees
- ❑ Safety training and testing

Presentations

- ❑ Interactive stand-alone presentations for shows and conventions
- ❑ Marketing and sales
- ❑ Demonstrations

HAMILTON MULTIMEDIA SYSTEMS, INC.

1733 South Douglass, Suite G
Anaheim, CA 92806

(714) 978-9487 FAX: (714) 978-9651

Partial Client List:

NCR Corporation, Remedy Temp, Express Personnel Services, Auto Trader San Diego, Imperial Credit Industries, Microtimes, Citizens Thrift & Loan, City of South Gate, Highland Federal Bank, Ormond Inc., Pioneer Savings and Loan, and more. . .

a couple of companies that sell such software. I hooked up my drive using Xetec's CDx software. CDx lets you access a CD just like any other device, in much the same way CrossDOS allows Amigas to read PC floppy disks.

CROSS-PLATFORM ACCESS

All CD-ROMs are capable of reading ISO 9660 disks. Thus, the same CD can be read on an Amiga, PC, or Mac. Of course, you cannot run PC-/Mac-executable programs on your Amiga without some type of platform emulation, but the data files are often very useful. Some disks will specifically state that they are ISO 9660, but many will not. A general rule of thumb is that if the same disk can be read on a PC and Mac, it will probably be in ISO 9660 format.

MORE ON CDx

In addition to ISO 9660, CDx also supports High Sierra, Macintosh HFS, Audio CD, and Photo CD formats. It supports multiple disk players and up to 16 CD-ROM drives on one system. Besides the CD file system software, CDx provides other features like CDTV emulation. While this is of limited value today, I hope they take this to the next logical level and support CD32.

The installation program has many configuration settings, but I left most of them at their default values and it seemed to work fine. The drive I used was an external OEM drive and thus did not appear on the CDx drive listing. However, I knew it was an NEC, so I just randomly selected one of the NEC drives and it worked perfectly.

My only real quibble with the CDx software is that it must reside in the SYS: partition. I would have preferred a flexible assignment, where I could direct the installation to any directory. My SYS: partition is crammed, but I just happened to luck out and have enough room.

If you're using OS2.0+, you can double-click on an audio CD's icon to play (assuming your drive is capable of doing so) or you can have it execute a customizable script. Alternatively you can run the fully featured virtual audio CD player. The player worked very nicely except that its overlapping screen confused my Retina display a little. It provides a graphical representation of all of the standard controls on a CD player, including shuffle play and scanning. I also found a great PD player whose window opened up on the Workbench.

If you like to program in ARexx, there's a slew of example scripts which execute one or more of the many small CLI programs. Generally, this involves control of an audio CD, since CDx already allows you to access a computer CD as a standard device. You could easily design your own virtual player using an authoring program like Helm or CanDo. For "real" programmers, extensive information is provided to allow control over a CD drive in designing programs.

PhotoCD access is accomplished via a CLI utility that converts a PCD format to IFF. This is not the most elegant implementation, but it does work most of the time. A few PhotoCD images I tried would consistently get colored streaks across the converted image. I found a PD PhotoCD loader for GVP's ImageFX that worked much better.

The informative CDx manual is detailed and supplemented by a ReadMe file. Xetec also includes "Fish & More Volume III," a collection of Fred Fish PD disks 1 to 910. I had a little trouble with a certain icon for a text file making my system hang. I got around this by copying all of the files except this icon file to my hard drive.

Many CD-ROMs for Mac and PC will work fine on a CD-ROM-equipped Amiga. Although PC- or Mac-executable programs will generally be useless on an Amiga, disks that contain mostly data files, like PostScript fonts, clip art, graphics, and audio clips can be very valuable to Amiga users.

CDTV

If you already have a CDTV you don't even need the file-system software. CDTVs read ISO 9660 disks as part of their native capability. So all you need to do is network the CDTV to another Amiga using something like ParNet, or even better, Amiga Link from Spectronics, and access the CD0: partition. You'll also need an external floppy drive to load Workbench.

Transfer speed is abysmal, but it works. The only disk I've ever had trouble accessing in this manner is, again, the Fred Fish disk that comes with CDx. It was basically unusable. With SCSI single-speed drives being discounted to under $150, I wouldn't recommend going out and purchasing a CDTV (even if you could find one). But just in case you have one lying around...

CD32

Two things stand in the way of similarly networking a CD32. One is that it lacks a floppy disk port; two, the serial connector is not Amiga standard. This will change as add-on devices are released for CD32, however. Commodore has indicated that CD32 compatibility will be offered for both the A1200 and A4000, but I'm not holding my breath.

SUMMARY

Adding CD-ROM and the right software, like Xetec's, to your Amiga will allow you to participate in the CD-ROM revolution. For now, this is pretty much limited to archival-type CDs, but what's wrong with having the entire Fred Fish library, or thousands of PostScript fonts, pictures, and clip art at your fingertips? If you're envious of the CD applications and games available on other platforms, go out and buy a CD32. ■

RESOURCES:

CDx, $50
Xetec
2804 Arnold Rd.
Salina, KS 67401
(913)827-0685

ItraStor | Adaptec | Colorado Memory Systems | Conner | Micropolis | NEC | Texel | Data Technology | SMC

Better Quality Doesn't Mean You Have to Pay More

PENTIUM SCSI II EISA + PCI

- 256K Cache (Up to 5 12K)
- 8MB (70ns) RAM (Up to 128MB)
- 1.2MB Floppy Drive
- 1.44MB Floppy Drive
- 32 Bit PCI Bus SCSI Ctrl & I/O
- 520MB SCSI Hard Drive
- Medium Tower Case w/230W Power Supply
- 32 Bit Diamond Viper PCI Bus 2MB
- 15" Flat Screen SVGA Monitor .28dp NI
- 101 Key Enhanced Keyboard
- Mouse with Pad

Pentium-60MHz $2895

Pentium-66MHz $3095

486 VL-BUS CAD SYSTEM

- 8MB (70ns) RAM & 256K Cache
- 1.2MB Floppy Drive
- 1.44MB Floppy Drive
- 32 Bit VLB IDE with I/O (2S/1P/1G)
- 340MB IDE Hard Drive
- Mini Tower Case w/200W Power Supply
- 32 Bit Cirrus Logic VLB w/1MB
- 14" CTX Super VGA NI Monitor .28dp
- 101 Key Enhanced Keyboard
- Mouse with Pad

486DX-33MHz $1529

486DX2-66MHz..... $1659

IBM 486SLC2-66MHz.... $1379

486 ISA WIN-STATION

- 4MB (70ns) RAM & 256K Cache
- 1.2MB Floppy Drive
- 1.44MB Floppy Drive
- IDE with I/O (2S/1P/1G)
- Mini Tower Case w/200W Power Supply
- 130MB IDE Hard Drive
- Trident 8900CL SVGA w/1MB
- 14" CTX Super VGA Monitor .28dp
- 101 Key Enhanced Keyboard
- Mouse with Pad

486DX-33MHz..... $1189

486DX-50MHz..... $1289

486DX2-66MHz..... $1319

486 PCI + ISASYSTEM

- 8MB (70ns) RAM & 256K Cache
- 1.2MB Floppy Drive
- 1.44MB Floppy Drive
- 32 Bit PCI IDE Controller
- Mini Tower Case w/200W Power Supply
- 420MB IDE Hard Drive
- 32 Bit Genoa PCI Super VGA Card w/2MB
- 15" CTX Flat Screen SVGA Monitor .28dpi
- 101 Key Enhanced Keyboard
- Mouse with Pad

486DX-33MHz $1769

486DX2-66MHz..... $1889

486DX4-100MHz VLB ... $2449

All Systems Come with One Year Parts and Labor Warranty.

NETWORKING PRODUCTS

8 BIT ARCNET, COAX STAR	$39
8 BIT ARCNET, TWISTED PAIR (3-in-1)	45
16 BIT ARCNET, COAX BUS	49
16 BIT ARCNET, COAX STAR	47
16 BIT ARCNET, TWISTED PAIR	59
ARCNET 8 PORTS ACTIVE HUB, COAX	99
ARCNET 8 PORTS ACTIVE HUB, TWISTED PAIR	145
ARCNET 4 PORTS PASSIVE HUB	15
8 BIT ENET, COAX	49
16 BIT ENET, COAX	55
16 BIT ENET (RJ-45/BNC/AUI) JUMPERLESS	75
16 BIT ENET 2000PLUS (RJ-45/BNC/AUI) JUMPERLESS	82
32 BIT EISA ENET (AUI/BNC/TP) 3-in-1	215
10-B-T 8 BIT ENET NE1000 COMPATIBLE	49
10-B-T 16 BIT ENET NE2000 COMPATIBLE	55
D-LINK 16 BIT 10-B-T OR BNC ENET (OEM)	72
D-LINK 16 BIT ENET COMBO (OEM)	175
D-LINK 32 BIT VESA LOCAL BUS ENET	365
SMC 16 BIT ETHERNET CARD COAX	139
SMC 16 BIT ETHERNET CARD 10-B-T	139
EAGLE TECHNOLOGY NE2000PLUS ENET	145
EAGLE TECHNOLOGY NE2000PLUS-3 ENET	165
EAGLE TECHNOLOGY NE2000T PLUS ENET 10BT	135
EAGLE TECHNOLOGY NE3200 EISA 32 BIT ENET	670
3COM 3C503 ETHERLINK II	185
3COM 3C503 ETHERLINK II 16 TP	205
3COM 3C501 ETHERLINK	310
3COM 3C509 ETHERLINK III 16 BIT BNC	130
3COM 3C509 ETHERLINK III 10BT TP	130
ARTISOFT LANTASTIC/AI V 5.0 FOR DOS	75
ARTISOFT LANTASTIC/AI V 5.0 FOR WINDOW	75
ARTISOFT LANTASTIC V.50 AE-2 STARTER KIT	535
ARTISOFT LANTASTIC AE-2 ADAPTER ENET 8/16 BIT COAX	215
ARTISOFT LANTASTIC AE-3 ADAPTER 10 BASE T	249
NOVELL NETWARE 386 V.3.12 5-USER DSK5	**575**
NOVELL NETWARE 386 V.3.12 10-USER DSK5	1285
NOVELL NETWARE 386 V.3.12 25-USER DSK5	1895
NOVELL NETWARE 386 V.3.12 50-USER DSK5	2495
NOVELL NETWARE 386 V.4.01 5-USER	775
NOVELL NETWARE 386 V.4.01 10-USER (CD ROM)	1650
NOVELL NETWARE 386 V.4.01 25-USER (CD ROM)	2200
NOVELL NETWARE 386 V.4.01 50-USER (CD ROM)	3250
NOVELL NETWARE 386 V.1,1 SINGLE	55
25 FT RG-58 COAX CABLE WITH CONNECTOR	15
50 FT RG-58 COAX CABLE WITH CONNECTOR	25
500 FT RG-58 COAX CABLE	75
RG-58 T-CONNECTOR	2.50
RG-58 50 OHM TERMINATOR	3.00
RG-58 CABLE CONNECTOR	1.50
CRIMPING TOOL FOR RG-58/RG-62 CACHE	25
CRIMPING TOOL FOR RJ-45 TWIST PAIR CABLE	29
CUTTER FOR RG-58/RG-62 CABLE	20
6 PORTS ETHERNET CONCENTRATOR 1 BNC/6 RJ-45	215
8 PORTS ETHERNET CONCENTRATOR 1 AUI/1 BNC/8 RJ-45	255
12 PORTS ETHERNET CONCENTRATOR 1 AUI/1 BNC/12 RJ-45	310
SMARTLINK 9600/2400 FAX MODEM INTERNAL /EXTERNAL	45/75
SMARTLINK 14400/14400 FAX MODEM INTERNAL/EXTERNAL	145/175
SMARTLINK 2400 MODEM INTERNAL/EXTERNAL	35/55
SMARTLINK 9600/2400 FAX MODEM W/VOICE MAIL FUNCTION	95
COLORADO JT-10 JUMBO TRAKKER 120MB (PARALLEL)TAPE DRIVE	299
COLORADO JT-20 JUMBO TRAKKER 250MB (PARALLEL) TAPE DRIVE	325
COLORADO DJ-10 JUMBO 120MB TAPE BACKUP	109
COLORADO DJ-20 JUMBO 250MB TAPE BACKUP	**172**
COLORADO POWER TAPE 2.0GB BACKUP INT./EXT.	950/1110
COLORADO POWER TAPE 4.0GB BACKUP INT./EXT	1480/1620
120MB/250MB CARTRIDGE (PREFORMATTED)	22/25

Networking, Installing & On-Site Service are Available in the Southland Area.

FREE On-Site Estimates Given!

MOTHERBOARDS

MB386DX-40/128K UP TO 32 MB	$109
MB486SX-25/0K UP TO 32MB	159
MB486SX-33/0K UP TO 32MB	189
ISA MB486DX-33/256K UP TO 32MB	369
VLB ISA MB486DX-33/256K 2 VLB/ZIF (30 PIN)	**369**
VLB IS MB486DX4-100 3 VLB/ZIF/GREEN (30 PINOR 72 PIN)	905
VLB MB586DX-60/512K 3VLB/3X16/1X8/FAN	1165
VLB EISA MB486DX-33/256K 2EVLB/6 EISA/ZIF (72 PINS)	539
PCI ISA MB486DX-33/256K GREEN FUNCTION	489
PCI ISA MB586DX-60/256K UP TO 128MB (72)	1160
PCI EISA MB586DX-60/256K UP TO 128MB (72)	1270
AIR VLB ISA MB486DX-33/256K 3 VLB/ZIF GREEN FUNCTION	415
AIR VLB ISA MB486DX-33/256K BUILT-IN FAST SCSI 2 & IO (72P)	569
AIR VLB EISA MB486DX-33/256K 3VLB/ZIF (72P)	649
AIR VLB ISA MB586DX-33/256K 3VLB/ZIF (72P)	1330
• Heatsink & Fan (486)	Add 9
• Heatsink & Fan (586)	Add 25
• DX2-50 cpu	Add 110
• DX-50 cpu	Add 125
• DX2-66 cpu	Add 135
• Pentium 586DX-66 CPU	Add 255
• SIM1MB-70NS	Add 40
• SIM4MB-70NS (30P)	Add 159
• SIM4MB-70NS (72P)	Add 155
IBM VLB 486SLC2-66/64K W/CPU & MATH	299
IBM VLB 486SLC2-75/256K W/CPU & MATH	645
GENOA - THE BEST BUNDLE PKG. IN TOWN!	
GENOA PCI486DX-33/256K (4 PCI/5 ISA) + GENOA PCI SVGA/2MB RAM (2 YEARS WARRANTY)	599
MICRONICS	
EISA MB486DX-33/256K ICP/E3	705
EISA MB486DX-50/256K ICP/E3	909
EISA MB486DX2-66/256K ICP/E3	997
VESA LB 486DX-33/256K VCPX	629
VESA LB 486DX2-66/256K VCPX	875
EISA VESA LB 486DX-33/256K	819
EISA VESA LB 486DX2-66/256K	1045
PCI PENTIUM MOTHERBOARD	1545

MONITORS

KFC 9" MONO AMBER	$115
KFC 9" MONO-VGA PAPER WHITE	135
12" MONOCHROME AMBER	75
14" MONO PAPER WHITE MONITOR	86
CTX 5468A 14" SVGA 1024x768 .28DP	250
CTX 1451 14" SVGA 1024x768 .28DP N.I.	275
CTX 1461 14" VESA 1024x768 .28DP N.I.	289
CTX 1561/LR 15" SVGA 1024 X 768, .28DP NI	CALL/345
CTX 1560/LR 15" SVGA 1024x768 .28DP N.I. DIGITAL	390/395
CTX 1760F/LR 17" SVGA 1280x1024 .28DP N.I.	695/715
NEC3V 15 FLAT (.28) 1024 x 768	525
NEC4FGE 15" FLAT (.28) 1024x768 N.I.	710
NEC5FGE 17" .28 1024x768 N.I.	1089
NEC5FGP 17"	1289
NEC6FG 21" .28 1024x768 N.I.72MHz	2350
MAG LX1564 15" 1280x1024, .28DP, N.I.	375
MAG MX15F 15"1280 X 1024 .28 NI DIGITAL, LOW RAD	458
MAG MX17F 17" 1280 X 1024 .26 NI DIGITAL, LOW RAD	839
VIEWSONIC 6E 14" .28DP 1024 X 768 NI	296
VIEWSONIC 15 15" .28DP 1280 X 1024, 60Hz, LOW RAD., FLAT	455
VIEWSONIC 17 17" .27DP 1600 X 1280 N.I., 76Hz, LOW RAD., FLAT	995
VIEWSONIC 20 20" .28DP 1600 X 1280 N.I., 76Hz, LOW RAD.,	1495
VIEWSONIC 21 21" .25DP 1600 X 1280 NI, 76Hz, LOW RAD, FLAT	1725

CASE & POWER

SUPER SLIM CASE W/65W	$76
DESKTOP CASE W/230W & DIGIT (3" X 5.25", 1" X 3.5")	49
MINI TOWER CASE W/230W (2" X 5.25", 1" X 3.5", 1" X 3.5") W/3 DIGIT	**45**
MEDIUM TOWER CASE W/250W (3" X 5.25", 2" X 3.5", 1" X 3.5") W/DISPLAY	69
FULL TOWER CASE W/250W (4" X 5.25", 2" X 5.25") W/DISPLAY	89
SUPER SERVER CASE W/300W 12 BAYS, 3 FANS, DOOR (H/W/D = 580 X 280 X 440MM)	375

MULTIMEDIA

SONY 31A-03 CD ROM/DOUBLE SPEED/390MS	$185
NEC TRIPLE SPEED CDR500 EXT. CD ROM (ORIGINAL)	585
NEC TRIPLE SPEED CDR510 INT. CD ROM W/6 CD TITLES BUNDLED	465
MITSUMI FX001-D CD ROM/DOUBLE SPEED/250MS W/16 BIT CTRL	175
TOSHIBA 3401 CD ROM/DOUBLE SPEED/260MS/SCSI	345
CREATIVE LAB SOUND BLASTER PRO DELUX	115
CREATIVE LAB SOUND BLASTER 16 BASIC	140
CREATIVE LAB SOUND BLASTER 16 BASIC-MCD	179
CREATIVE LAB SOUND BLASTER 16 BASIC-SCSI-II	195
CREATIVE LAB SOUND BLASTER 16 SCSI-II	205
CREATIVE LAB SOUND BLASTER 16 M-CD	189
CREATIVE LAB SOUND BLASTER 16 ASP SCSI-II	215
CREATIVE LAB SOUND BLASTER 16 ASP M-CD	199
CREATIVE LAB MULTIMEDIA UPGRADE KITS:	399

Sound Blaster Pro Delux/Panasonic Double Speed CD ROM

Mini Speaker/6 CD Titles/Microphone Karaoke

HARD DISK DRIVES

CONNER 210MB/17MS IDE	$205
CONNER 250MB/14MS/64K IDE	239
CONNER 340MB IDE	280
CONNER 540MB/12MS/256K IDE	395
WD 212MB/13MS IDE	225
WD 250MB/13MS IDE	235
WD 340MB/13MS IDE	285
WD 420MB/13MS IDE	305
WD 540MB/11MS IDE	399
QUANTUM 170MB IDE	199
QUANTUM 270MB IDE/SCSI	245/265
QUANTUM 525MB SCSI	**515**
QUANTUM 540AT/540S 540MB/12MS/128K IDE/SCSI	450/525
QUANTUM 1080S 1.08GB/9MS/512K SCSI-II	829
QUANTUM 1225S 1.2GB/9MS/512K SCSI-II	929
QUANTUM 1800S 1.8GB/9MS/512K SCSI-II	1280
SEAGATE 31200N 1.05GB/9MS/256K SCSI-II	805
SEAGATE 11950N 1.6GB/9MS/1MB SCSI-II	1475
SEAGATE 12550N 2.1GB/9MS/1MB SCSI-II	1770
MICROPOLIS 2210A/4110 1.05/8.5MS/3.5" IDE/SCSI-II	795/795
MICROPOLIS 2217 1.75GB/10MS/3.5" IDE/SCSI-II	1165/1165

CONTROLLER CARDS

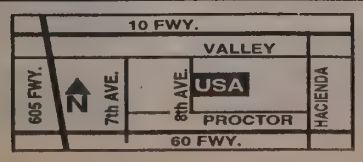
High Speed AT IO (16C550 Chip)	$29
High Speed AT IO w/IDE (2HD/2FD) Ctrl	39
Promise-DC200 ISA IDE Caching Cntrl, 4HD/2FD (up to 16MB)	109
Promise-4030VL VLB 32BIT IDE Caching Cntrl, 4HD/2FD (up to 16MB)	159
Promise-4000VL VLB 32BIT IDE/IO Cntrl, 2HD/2FD	69
Promise-2000VL VLB 32BIT IDE/IO Cntrl	20
Promise-5100VL VLB IDE Ctrl. w/High Speed I/O	49
Adaptec 1542C SCSI Ctrl Card	205
Adaptec 1542CFK SCSI Ctrl w/Novell S/W (Bus Master)	**255**
Adaptec 2742T EISA SCSI-II Ctrl (Bare)	360
Adaptec 2742TK EISA SCSI-II Ctrl w/Novell S/W (Bus Master)	410
Adaptec 2842VLK VLB SCSI II Ctrl w/Novell, OS2 S/W	315
PCI IDE Ctrl Card	45
PCI SCSI Ctrl, NCR 53C810 32 Bit Non-Cache	105
6 times faster than ISA SCSI Controller as well as VLB IDE caching (4MB) ctrl	

VIDEO CARDS

ISA:	
Diamond Speedstar Pro (ISA) 1MB w/$500 FREE Software	$115
Diamond Stealth 24 (ISA) 1MB w/$500 FREE Software	160
Diamond Stealth Pro (ISA) 1MB VRAM w/$600 FREE Software	245
VLB:	
Cirrus Logic 5424 VLB SVGA 1MB	**$69**
Cirrus Logic 5428 VLB SVGA 1MB up to 2MB	95
Diamond Speedstar Pro (VLB) 1MB w/$500 FREE Software	117
Diamond Stealth 24 (VLB) 1MB (OEM Pkg)	**145**
Diamond Stealth 32 (VLB) 2MB	220
Diamond Stealth Pro (VLB) 1MB VRAM	247
Diamond Viper (VLB) 2MB VRAM	375
* 2MB Upgrade Kit for Diamond Stealth Pro (ISA/VLB)	Add $115
(All original retail pkg. from Diamond's)	
Orchid Fahrenheit S3 VLB w/1MB	155
Orchid P9000 VLB 3MB 1600 x 1200	350
Number 9 VLB SVGA w/2MB RAM Model #Level 11	355
Number 9 VLB SVGA w/3MB V/DRAM Model #Level 12	**399**
PCI:	
Genoa PCI SVGA 1MB DRAM	$189
Genoa PCI SVGA 2MB DRAM	239
Diamond Viper PCI SVGA, 2MB VRAM 64 Bit	415
ATI Mach 32 PCI SVGA, 2MB VRAM	395

KEYBOARDS

MITSUMI 101K SOF CLICK	$25
FOCUS FK2001A 101K KEYBOARD WITH DUST COVER	36
FOCUS FK6000 102K KEYBOARD	28
FOCUS FK7000P 103K WITH TRACKBALL	42
FOCUS FK8000 111K KEYBOARD W/CALCULATOR	42
FOCUS FK9000 130K PROGRAMMABLE KB W/CALCULATOR	59
KEYTRONIC 101K KEYBOARD	34
FUJITSU 4700	44
LITEON SK0002 (HONEYWELL)	34



USA SYSTEMS
Your Solution Partner
148 8th Ave., #H, City of Industry, CA 91746
(818) 961•2469 • FAX: (818) 961•4420

Price, specifications and availability are subject to change without notice. Brand names are registered trademarks of their respective companies.

American Express | MasterCard | American Express | UPS

Office Hours:
Mon.-Fri.: 9:00 am - 7:00 pm
Saturday by Appointment

Diamond Computer Systems, Inc. | Micronics | Toshiba | Trantor | Colorado Memory Systems | Conner | Micropolis | NEC | Texel | Data Technology | SMC

Multi & Media beyond

New Sounds From The Mac AV

Considerations Of Computer Acoustics

BY TONY REVEAUX

Sound is an integral element of multimedia, and capabilities for recording, editing, manipulation, and playback are incorporated in computers more and more. In the PC/DOS sphere, one of the hottest peripheral markets these days has been for add-in audio cards such as Creative Technology's Sound Blaster and the models from Media Vision. Higher-end games and multimedia software products, all of which need deeper and stronger sound support, are driving this market.

The Macintosh has always had built-in sound, provided through an audio chip built into the motherboard. When the software calls for it, the 8-bit, 11kHz chip can support sound recording and playback, even acting as a four-voice digital synthesizer. With the Macintosh AV computers, though, audio really becomes native to the machine.

There, the 68040 CPU is joined by a 66MHz AT&T 3210 DSP (Digital Signal Processor), which provides such capabilities as Apple's PlainTalk speech recognition. With the optional GeoPort Telecom Adapter, it helps to support telecom, virtual faxmodem, and videoconferencing. For multimedia production, 16-bit stereo audio capture and playback with CD-quality sound manipulation is one of the AV's more stellar qualities. The ability to record direct to disk from the internal CD-ROM player in the playthrough mode is the kind of perk you can enjoy when full audio is native to the system.

AV'S SOUND

But all that sound will remain underutilized if the computer's audio playback cannot match the quality of the source. Along with the sound cards, self-powered speakers represent another growing market. Apple has matched the AV computers with its Power Speakers (around $150 street), a pair of external speakers, and the AudioVision 14 Display (around $680

Copyright © 1994 by Tony Reveaux. All rights reserved. *Tony Reveaux, a San Francisco-based consultant, writes the "MediaScan" column in Film/TapeWorld. He can be reached via Usenet (luna@well.sf.ca.us), AppleLink TREVEAUX, or MCIMail 290-3008.*

Whether your office has one computer or one hundred....

We keep you working

AUTHORIZED TECHNICAL SERVICES has the experience *and* the expertise to handle your equipment service needs. Whether you're running one small office with one micro computer, or a statewide network of offices with a complex inventory of computers, video display terminals, printers and data communications devices—you simply cannot afford "down time". Call **ATS** today to find out just how easy it is to stay productive

ATS
AUTHORIZED TECHNICAL SERVICES
1-800-451-4057

HERE'S A PARTIAL LIST OF EQUIPMENT WE SERVICE:
MICROCOMPUTERS: Dell, Epson, Advance Logic (ALR), AT&T, Everex, Leading Edge, AST Research, Compaq, IBM. **LOCAL AREA NETWORKS:** 3Com, Novell. **STORAGE DEVICES:** IOmega (Bernoulli). **DOT MATRIX PRINTERS:** Alps, Datasouth Epson, NEC, Panasonic, Citizen, Texas Instruments, C. Itoh, Digital Equipment (DEC), IBM, Okidata, Printek, Toshiba. **PLOTTERS:** Hewlett-Packard, IBM. **THERMAL PRINTERS:** IBM, Texas Instruments, Panasonic. **LINE PRINTERS:** Data Products, Printronix. **LETTER QUALITY PRINTERS:** C. Itoh, Diablo, NEC Spinwriters. **LASER PRINTERS:** Canon, Epson, IBM, AST, TI, Hewlett-Packard. **VIDEO DISPLAY TERMINALS:** Digital Equipment (DEC), Link, Qume, Tab, Televideo, Wyse. **DATA COMMUNICATIONS:** Hayes.

ATS SERVICE CENTERS:
Los Angeles (310) 839-0020
Orange County (714) 937-0332
Oakland (510) 638-4449
Sacramento (916) 923-2944
San Jose (408) 970-9860

street), which is one of the most advanced and interesting configurations of a monitor for multimedia.

The creative engineering behind these two products was provided by Howard Lieberman, now president of ESCAtech Media Inc. of Half Moon Bay. His background goes back to the Bose Corporation of Framingham, Massachusetts, designing OEM sound systems. When Bose started its relationship with Delco to build the sound systems for General Motors cars, he was involved in developing the measurement systems to design those complex molded speaker enclosures coiled beneath the dashboards of Chevys and Buicks. Later, he was brought into Apple as an acoustics consultant on the Macintosh AV system, then codenamed "Cyclone." Within a short amount of time Lieberman found himself acting as head of Sound and Music at Apple Computer, where he supervised the development of all acoustical products. "I see sound as an engine that can emotionally engage people," he says. "Computers are mostly good at linear, rational intellectual kinds of exercises."

There were plenty of self-powered mini, or "bookshelf" speaker pairs around that Apple could have platinumed over to complete their product line. But these fairly efficient, low-cost systems have evolved from the boom-box stereo system add-on market to something designed to convey rock music at entertainment volume levels. Apple wanted speakers that were optimized for positions on either side of the computer monitor. They had to pump out high-efficiency curves at the lower levels demanded in workplace and classroom environments. Thus, the Power Speakers were designed and built from scratch rather than as a repackaging of consumer electronics products.

The AudioVision 14 Display is a gracefully logical configuration that integrates all the audio functions of recording and playback. Its sharp and clear 14" Trinitron CRT displays 640 x 480 vertical lines at 70 dots per inch. Built into its frame at the top is a directional microphone. The small twin speaker grilles are built into the lower face of the frame. Between them are the blatantly easy-to-use user controls for contrast, brightness, mute, volume, and microphone. Instead of diving for your mouse and scrabbling for the right icon on the screen, you can change the volume with a touch. At the sides are two ADB ports, one stereo line/mike input port, one stereo headphone/speaker output port, and one video-in port. Instead of using the hand-mirror-in-back-of-the-box trick to patch in the audio from an external device, I was able to plug them in in plain sight. A tilt-and-swivel base takes little effort to adjust. Add a camera, patch it into the video-in port, and you have an ideal platform for desktop videoconferencing.

COMPUTER ACOUSTICS

"The most important thing about these two kinds of products," says Lieberman, "is that there is a category of sound called 'computer acoustics,' which is in its infancy. This first generation of them did an okay job to start, but it can get a whole lot better."

The system benefits from extensive reality checks the designers made in confronting the conditions a user would experience while performing voice recognition, voice annotation, and videoconferencing. "That microphone and the [separate] microphone for the Quadra 840 AV both share very common goals," says Lieberman. "The reason for that depression in the frame topology is that when you want to speak to your computer there's a lot of noise pollution in the office environment. There is wave reflection when sound bounces off walls, which can confuse the CPU as it tries to filter out the extraneous information and tries to figure out what you said.

"I had the idea of making a very directional microphone that would cut out the reflections, by having a pressure gradient microphone in which the back wave, and the cardioid pattern of the front wave that are entering at certain frequencies, cancel. In the spectral domain we filtered out the low- and high-frequency noises that would not be in the speech band. It was hard to do because we had to use very inexpensive parts (for the manufacturing model). When the speech recognition team started working, they were using a $400 microphone. You can't talk to a computer if it doesn't have ears!

"The speaker designs for the two products are different. They both were created by two different vendors to my specifications, and two manifestations of the concept differed a little bit in terms of the spatial and spectral and dynamic aspects of the products. The one in the monitor was made by an American company, and the ones in the Power Speakers were made by a Far Eastern company. The bass response in the monitor is a little bit better, and the radiation pattern of the Power Speakers is a little bit broader. The speakers in the monitor are .7 watts and the Power Speakers are .5 watts.

"Neither one of them is very directionally designed; they were empirically tested for near-field sound. With the closeness of the two speakers in the monitor—9" center-to-center—you do get a tighter radiation pattern."

Why haven't other manufacturers built in speaker enclosures within their monitors? The speakers can perturb the monitor magnetically with the vibrations caused by delivering bass in a small enclosed space. Also, there are two kinds of monitors. The Sony Trinitron has an aperture grille, and the rest have shadow masks—membrane with holes.

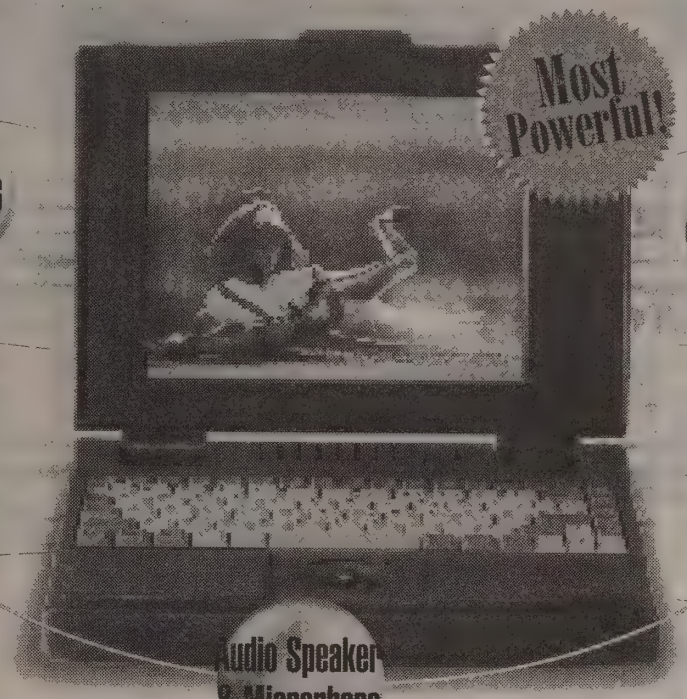
The Trinitron's aperture grille is a grid of very thin wires that direct the electron flow, which results in a crisper, sharper image. "Since these fine wires are stretched across a pattern," says Lieberman, "they are shaken by the bass. There's a resonant frequency of that wire. So when you deliver a bass at such proximity, the picture moves. It was very hard for us to isolate the bass from making the picture move. And we did succeed, but we couldn't get as much bass in the box as we wanted to."

The one anomaly of the AudioVision display is the way that it connects to the CPU. Instead of a neat dock, a bulky, NASA-like multi-cable links the two units. Explains Lieberman, "We had felt that multimedia producers needed a 16" monitor for the Cyclone, which turned out to be the Quadra 840 AV, and at the same time we were trying to get the group of monitor people to talk to the group of CPU people so that the right connectors could exist on both units, so they could plug into each other.

"But they wouldn't agree. So, unfortunately the AV monitor was born and the AV Quadra was born in an incompatible way as far as the connectors were concerned. The code name for that product was 'Spaghetti' [the cable] and 'Meatball' [the connector]. I was really disappointed that management didn't think the monitor was a good enough idea to make a 16" one, or to continue the product line. Of the thirty-one guys invclved in sound and music and in DSP, there is only one left." ■

Smart Power at Your Fingertips

*Smart*Book II -The Ultimate Business Power Notebook



PACKED WITH POWER!

- Powerful - 486 SL Enhanced CPU
- Long Lasting - Double NiMH Batteries up to 8 Hours
- Fast - VESA Local Bus Video and 1MB Video Memory
- Flexible - Up to 32MB RAM and 524MB HDD

Monochrome 486SX-25..... $1,690

SmartBook Standard Features:

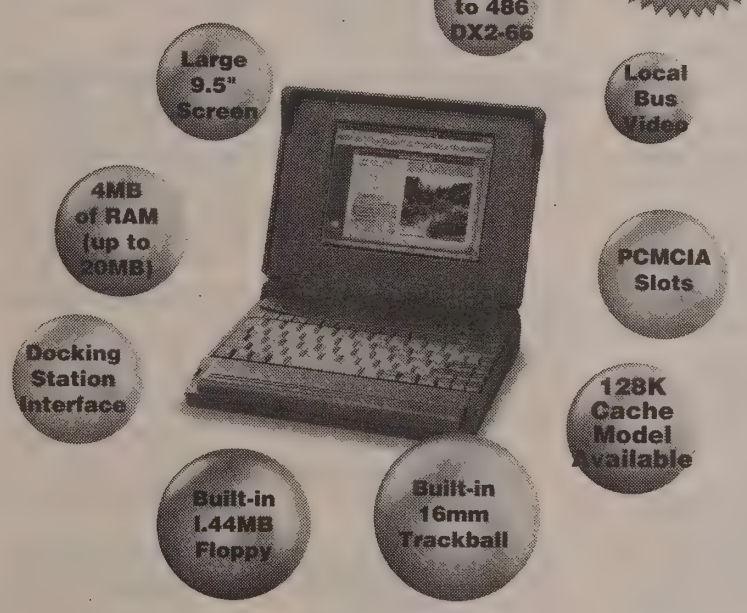
- **Active Matrix / Dual Scan / Monochrome**
- 4MB of RAM Standard
- 120MB Upgradeable Hard Drive
- PCMCIA Expandability
- Built-in Audio Capability (Model II only)
- Rechargeable Battery
- IBM PC-DOS 6.1
- Windows 3.11
- Carrying Case
- Optional Fax Modem, Docking Station, Lan Adapter

intel inside

*Smart*Book Plus

All The Power of SmartBook at a Best Buy Price!

Best Buy



Monochrome 486SX-25 ..... $1,495

Ask about our docking station with Local Bus slots

COMMAX

TECHNOLOGIES, INC.

1-800-5-COMMAX

2031 Concourse Drive, San Jose, CA 95131

In Calif: (408)435-5000 • FAX: (408)435-5005

The Intel Inside Logo is a registered trademark of Intel Corporation. Prices and configuration subject to change without notice.

Classifieds

Accessories

XDR II Co. 800/541-7425
14755 Ventura Blvd. Ste. #713, Sherman Oaks, CA 91403-3087
Los Angeles: 818-701-7425 Fax: 818-752-7425

DISKETTES

Formatted	100% Error Free	Qty. 50
5.25"	DS/DD	19¢
5.25"	DS/HD	21¢
3.5"	DS/DD	23¢
3.5"	DS/HD	34¢

Data Cartridges

Brand	Part Number	Qty. 3
3M	DC2120	$13.95
KAO	KC2120	$11.95
3M	DC2120Xi	$16.95
Verb.	DL2120Q80	$15.95

If it says: "We will beat any advertised price"...
It means: "We over-charged you in the first place, and if you can catch us we will fix it."
At XDR II: "*We set the prices, they try to beat.*"

Prices good thru: Apr. 30, 1994
Shipping: (FOB: Los Angeles) Actual UPS+$5.95, COD +$5.00
Quantity Discount: Available.
10+ years of media experience.
XDR II Co. is a Xanadu Enterprises Company. (c) 1994.

AAA America's Advanced Accessories Incorporated

DISKETTES

Premium FORMATTED *(100% Error Free)*

	Qty 500	Qty 50
3.5" DS/HD	33¢	34¢
3.5" DS/DD	21¢	22¢
5¼" DS/HD	19¢	20¢

We Will Beat Any Advertised price
1-800-214-4444

12V to 110V inverter (1) 240 watts $75, (2) 300 watts $95. (800)245-1827

Prodigal Son's FREE Stuff!! Ring, ringsizer & bracelet. Send $1 shp/hndl to: S.K. Schramm, PO Box 2061, Santa Ana, CA 92707

Wanted: computer, copy machine for a non-profit legal service organization. (714)531-1703

Accounting

Easy-to-learn Accounting Softwares for Business/ Home. Installation, Customized Setups, Training (single user or network.) DacEasy Dealer, ACCPAC, etc. R. MAYER & ASSOCIATES (818)385-1719

Accounting

The Computerman, Inc. Accounting: Daceasy, Mac P&L, MAS90 & many more. Networking: Novell, Lantastic & Telemagic. We support all databases and spreadsheets! Analysis, design & custom programming. hardware & software sales and service. Authorized Apple & IBM dealer. The Right Choice! 1-800-286-6798

Bar Coding

SAVE TIME Using our Bar Code inventory systems for greater profitability. We propose solutions. The recession is over. Time to kick ass: (702)885-9125.

Bulletin Boards

ATTENTION ALL BBS USERS!!! SAVE UP TO 45% OR MORE ON ALL YOUR LONG DISTANCE USAGE OVER AT&T, MCI, AND SPRINT. SEND SELF-ADDRESSED ENVELOPE FOR FREE INFO TO: CMA, PO BOX 14874, FREMONT, CA 94539

Bulletin Boards

LOG – ON!
VIEW CAREER OPPORTUNITIES & RESPOND ON-LINE
Directly to the Employers:
(415) 917-2125 14,400 BPS
(415) 917-2129 2400 BPS
Internet Access: Career. Com
Telnet: Career. Com
Modem Settings:8,1,N
Emulations: ANSI or VT100
Career Connections™

Compu-Net So Cal's largest file and message board. Internet, Dating, Adult, IBM, Mac, Amiga, Stocks, News. FANtastic! (310)822-0038

Lasix BBS (818)892-5477 2400-14400 Thoroughbred handicapping, horses, CD-ROM, 6000 files, GIFs, doors. Affordable handicapping data.

LIBERTY BBS modem 800-474-1818. Local access phone numbers from 9 Calif. area codes. Internet E-mail & Usenet Newsgroups. Linked nationwide for chat 6pm - midnight every evening! Free time on first & every call!

Bulletin Boards

Modemboy. Gay, bi, curious. Instant access, 32 lines, photos, live chat, campy fun! (310)659-7000 (818)996-7900 (818)846-3000

MR WONDERFUL'S LAIR (213)261-8055 2400/14400. FREE 4 week account. Internet, ECHO Mail, Adult/Shareware 12 CDs online.

SENTINEL INFORMATION SERVICES Forums, Games, Internet, Personals, Classifieds, Adult Section, Live Chat and more. Free month trial. (714)552-6209

The Empire BBS Inland Empire's fastest growing system. Live games, group chat, files, adult accessories and more. Free trial! Call (909)980-2306

Bulletin Boards

The Viewlink BBS. (714)650-4612. Latest Shareware & Adult GIFs. USR 14.4. We buy adult photos.

UNZIP IT! Download sexy GIFs 1(900)844-2200 69¢ per minute. Must be over18 years old.

Business Opportunities

Get paid $268.20 per roll taking easy snapshots! No experience. Film supplied. (310)549-0997 Ext. 44

Cartridge Refill

Recycled cartridges for Xerox copiers and ALL laser printers. Xerox 5018, 5028, 5034 & 1012 copy cartridge (drum). All Canon, HP, Epson & Panasonic toner and drums! 1/2 cost of new! 100% guaranteed! National Copy Cartridge (800)822-5477

MICROTIMES CLASSIFIEDS MICROTIMES

HOW TO PLACE YOUR CLASSIFIED AD IN MICROTIMES

MINI DISPLAYS: 1 column inch = 1 5/16" x 7/8" wide. $59 per col/inch, camera ready art, or $59 + $20 for 1x typesetting/production fee.

BUSINESS ADS: Rates are $20 for 15 words or less. $.50 for each additional word. Your phone number counts as one word. First few words or line is bolded.

CATEGORIES: See index to choose the classification that best describes your product or service.

FREE ADS: Private individuals may have one free classified ad one time of 15 words or less under Hardware, Software, or Accessories only. Mail coupon by the noon deadline for that issue, no phone orders for free ads.

No refunds will be given after copy is received. Credit may be given under certain circumstances.

Mail, deliver or fax this coupon along with payment by the noon deadline for that issue.

TO RESERVE SPACE:
Phone Orders
(213) 8518600
Fax Orders
(213) 851-8303
with Visa or MasterCard Only

CLASSIFIED CATEGORIES
- ○ Accessories
- ○ Bar Coding
- ○ Bulletin Boards
- ○ Cartridge Refill
- ○ CD-ROM
- ○ Computer Rentals
- ○ Data Conversion
- ○ Data Recovery
- ○ Desktop Publishing
- ○ Hardware
  - ○ For Sale
  - ○ Wanted
- ○ Miscellaneous
- ○ Personals
- ○ Optical Scanning
- ○ Repairs
- ○ Services
- ○ Software
  - ○ For Sale
  - ○ Wanted

CAREER MARKETPLACE CATEGORIES
- ○ Employment Information
- ○ Jobs Offered

CONSULTANTS NETWORK CATEGORIES
- ○ Accounting
- ○ Business Opportunities
- ○ Engineering
- ○ Finance
- ○ General
- ○ LAN
- ○ Legal
- ○ Programming
- ○ Technical Writing
- ○ Training

- ○ **MULTIMEDIA**
- ○ Other_____

_____
_____
_____
_____
_____

Cost of ad_____ x number of issues to run_____= Amt. enclosed_____
Discount: 7x = 15% 14x = 25%

○ **Classified** ○ **Career Marketplace** ○ **Consultants Network** ○ **Multimedia**
○ Check/MO ○ Visa ○ MasterCard Credit Card #_____Exp. Date_____

Name_____
Adress_____
City_____State_____Zip_____
Phone (_____)_____

SEND TO: MicroTimes Classifieds, 6767 Forest Lawn Drive, Ste. 110, Los Angeles, CA 90028

DEADLINE FOR INSERTION IN THE MAY 16, 1994 ISSUE IS NOON ON WEDNESDAY, APRIL 27, 1994.

Classifieds

Cartridge Refill

Recycle Your Toner Cartridges

APPLE • CANNON • HP • IBM

- Save 40% in Cartridge Costs
- Print Quality As Good As New
- Important Recycling Opportunity
- Fully Guaranteed
- Free Pick-Up And Delivery In Greater Los Angeles Area

$$$

(818) 305-0844 or (213) 624-0089

LAZER CARTRIDGE SERVICE

"Serving Los Angeles Since 1987"

We also buy empty cartridges

LASER CARTRIDGE RECYCLING

Printer Repair

Recycled Toner Cartridges
Quality as good as new!

10% Off When You Mention This Ad

For Your: Canon, Panasonic, HP, Ricoh, Xerox, IBM, NEC, And all other laser printers, copiers & fax machines.

100% Guaranteed
Each Cartridge is disassembled, inspected, and all worn parts replaced. It is then refilled with a high-grade toner and tested for maximum performance.

FREE Pickup & Delivery
(We also Buy Empties)
Call Toll Free:
800-5-RECYCLE

Laser Toner Cartridge Re-Manufacturing

- HP, Apple, Canon & Sun Cartridges Recycled!
- Laser Printer Repairs

OPEN SEVEN DAYS

Sun Sparcprinter toner cartridge $62.95

Environmental Laser
708 Flagler Lane
Redondo Beach, CA 90278

(310) 717-1448
(310) 372-0175
Fax: (310) 374-7929

CD ROM

CD-ROM DRIVES

Toshiba, Plextor, NEC
SCSI Interface cards
Trantor and Media Vision
Large selection of compact disc software
Caddies • Accessories

COMPUTERS AT LARGE
Saratoga, CA
Dedicated to CD ROM Technology

Please Call for Our Price List
800-642-4194 408-255-1081
408-255-2388 Fax

CUSTOM CD ROMS

★ COMPLETE DUPLICATION & PRODUCTION SERVICE
★ HELP YOU DEVELOP MULTIMEDIA APPLICATIONS
★ INPUT YOUR DATA, DOCUMENTS, PRODUCTS & IDEAS ON CD ROMS.

CALL MIS AT
310★867★1790

CD ROM

CD-ROM multimedia. Lowest prices. Largest selection of information, games, enrichment and educational titles. Call for catalog. (310)823-5006

CD-ROM Recording & Back-Up Copy, (ISSO9660) call TOP CHEER. William (213)388-5856

CD-ROM WHOLESALE CLUB Adult CD-ROM Interactive only $19.99. 4-color catalog down load. BBS (714)552-6209 SENTINEL ON-LINE SYSTEMS

Cartridge Refill

Capitalize on Your Experience... Increase Your Income...

Attend the One-Day Seminar...

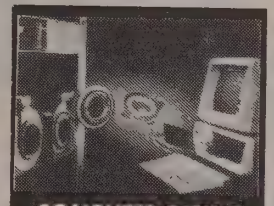
HOW TO START & BUILD A PROFITABLE COMPUTER CONSULTING PRACTICE

FULL-TIME or PART-TIME
Sat. April 23, Pomona
Call For Later Dates
Offered Monthly

(213) 321-9342

William Mooney Associates
The Center for Consulting & Professional Practices
19401 S. Vermont Ave., Ste J-102D
Torrance, CA. 90502

Data Conversion



COMPUTER DISK & TAPE CONVERSIONS

Micros • Minis • Mainframes
Floppies, CD's, 1/2" & Cartridges
DATA CONVERSION SERVICES
(800) 327-0330

Desktop Publishing

CEDAR'S CONSULTING-OCR scanning at 75 cents a page. Also B&W, Gray Scale and color scans up to 600dpi in many formats including JPG. In addition we also offer in-house training in DOS Windows and word processors...PC platform...(310) 328-2044

Recycled cartridges for Xerox copiers and ALL laser printers. Xerox 5018, 5028, 5034 & 1012 copy cartridge (drum). All Canon, HP, Epson & Panasonic toner and drums! 1/2 cost of new! 100% guaranteed! National Copy Cartridge (800)822-5477

Hardware

14" SVGA monitor, Goldstar 1450+, N.I. .31 (800X600). Tilt/swivel base $125 (310)798-2878

286AT system, 1MB RAM, 40MB HD, EGA monitor, software, $400. JVC 19" SVGA monitor $550. (818)446-7934

486-40 Vertical case 1MB RAM, 1.44 FDD includes monitor and keyboard, $580. 386DX-40, $480. (213)728-4507

Data Recovery

DATA RECOVERY

24 Hour Turnaround • Free Estimate

DATA-ONE
(408) 434-1002

940 Rincon Cir. San Jose
(HWY 880 & Montague)
9-5 Mon thru Fri

DATA RECOVERY

- Recover your data even if it was refused from other company.
- MACINTOSH • OS/2 • UNIX • DOS • FLOPPY DISK • NOVELL 286/386
- Lastest technology
- Highest success rate

4448 INDUSTRIAL ST
SIMI VALLEY CA 93063
MICRO COM
TEL 805-582-9082
FAX 805-582-9102

Ontrack Data Recovery

The world leader in professional data recovery services!

- Expertise in DOS, Novell, Macintosh, OS/2, Unix, Xenix, DEC, Sun, Wang, Banyan Vines and more!
- Service available on DAT, tape backups, and removable media.
- Professional service authorized by Conner, Iomega, Maxtor, Micropolis, Quantum, Rodime, Seagate, and Western Digital.
- For fast, successful results call Ontrack!

Ontrack DATA RECOVERY

CALIFORNIA LAB NOW OPEN!
2400 Main Street, Suite 200, Irvine, California 92714

1-800-752-7557
714-263-9245
MN: 1-800-872-2599
UK: 44-81-974 5522
Germany: 0130-815-198
France: 05 90 72 42

DATA RECOVERY

Data returned "plug & play" on your drive
Very reasonable prices
Success rate over 90% • Rapid turnaround
DISK DRIVE REPAIR & SALES
Disk Drive Technical Data and Formatting Guide V.5 Now Available!

DRIVE SERVICE COMPANY
3303 Harbor Blvd. • Ste. E-7 • Costa Mesa • CA • 92626
714-549-3475 • Fax 714-549-9752

Hardware

WE BUY MEMORY

SIMM - SIPP - DIP - ZIP - SOJ

Toshiba Samsung NEC Mitsubishi Motorola IBM

We'll BUY/TRADE all types
>NEW >OLD >UNSURE

Call (714) 540-5137
FAX List etc. (714) 540-5139

Ask about our TRADE-IN program

Custom Computer

Complete 486 Systems From $675!

- The Best in Prices
- The Best in Quality
- IBM Compatible/VL Bus Specialist/Build to Specs

Call Us *LAST* (213)461-4556

486DX25 tower case 4Meg RAM. 100 Meg hard drive Mitsubishi diamond scan monitor, $1000 (714)723-1985

486DX50 16/600+ w/20 user Novell 3.11, 386DX25 4/200 w/20 user Novell 3.11. Andy (310)677-6798

9-Track tape drive-800-6250 BPI. Includes software and controller. Perfect condition. Asking $5,000 (909)428-0585

Commodore 64 computer with software, $90. Call (310)973-2129

Conner 345MB IDE HD loaded w/Windows base software $300. Jay (310)916-2909

Hardware

Lots & Lots of MONITORS!

Custom Computer
(213) 461-4556

MICROTIMES Classifieds WORK!

Call Warren
(213) 851-8600

Digiboard Multiuser host adapter (8 parts). With cables, manuals and software $250. (310)278-7788

IBM computer 286 w/math coprocessor, 1 RAM, VGA monitor, 20 MB HD, $350 obo. (714)526-1035

IBM mainframe monitor model 3191 plus keyboard (model M) and cables. Never Used $100 (310)452-1293

NEC Postcript laser w/2 years written warranty, $900 or will trade 4MB SIMM modules (714)839-7669

PC 486DX33/40MHz, 170MB, 4MB RAM $888, 17" Super VGA/14" SVGA $599/210. (310)944-8240

Printer, Citizens, MSP25, wide, model s/n 4000734-510, Full box of paper. (714)631-8124

Subnotebook, 16Mhz, 2MB RAM, 65M HD, works great, must sell ASAP, $450 obo, Kelvin (714)775-1691

SVGA 14" Color .28 dp. Great monitor with warranty. Won't last, $165. Custom Computer (213)461-4556

SVGA monitor w/VGA card, $200; w/SVGA card, $220. Pager: (818)217-0709

Swap: PLI 40 Turbo Sysquest drive for broken macintosh SE or Macintosh plus. Joe (818)545-8282

Hardware Wanted

386 or 486 notebook, color or monochrome with min. 8Meg hard drive. (714)533-4671

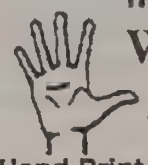
Classifieds

OpticalScanning

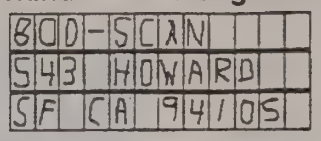
If you can create a form ...

Why enter data by hand?

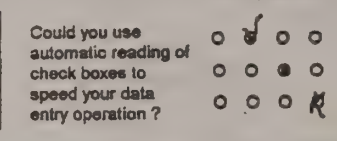
... When you can *automatically* capture it!



Hand Print Recognition



Check Boxes (OMR)



Surveys Market Research Order Forms Payroll Info

Introductory Special

$1295.00

Automatic Data Entry Software Package

Includes... Forms Designer, Hand Print & OCR Recognition, Check Boxes Reading

Works with Fax boards and Scanners

Outputs to dBase, Paradox, Excel, ASCII & more

Requires Windows 3.1, 386 or faster, 4 meg RAM

Orders Only 1 800 800-7226

Questions 1 415 974-6194

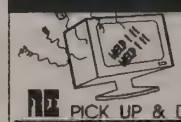
800-SCAN • 543 Howard Street • San Francisco CA 94105

OpticalScanning

OpticalScanning

Repairs

FAST & PROFESSIONAL
Monitor & Terminal Repair



3 DAYS TURN AROUND
- QUALITY REPAIR ■ FLAT RATE
- All REPAIRS ARE BURNT IN,FINAL AND QA
- 6 MONTHS WARRANTY ON PARTS AND LABOR

PICK UP & DELIVERY (3 units or $245 up and for local area only)

IBM, COMPAQ, APPLE, MACINTOSH, RADIUS, AST, AT & T, NEC, WYSE, SAMSUNG, TATUNG, ZENITH, MEMOREX, MITSUBISHI, And MANY MORE !!...

A&T Ant co. ⇒ Try us out !!!

TWO LOCATIONS TO SERVE YOU

Tel : 714-549-3628 Fax: 714-549-8651

Tel: 310-633-0654 Fax: 310-402-5600

Repairs

ACCUTEK MONITOR & UPS REPAIR

Specializing in UPS • IBM • NEC • MAC

VGA $65 MULTISYNC $85 WYSE $55

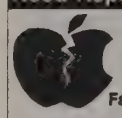
Free Estimates • 3-Day Turnaround • 90-Day Warranty

(714) 458-2270 • FAX (714) 458-2947

24602 Jatewood Place • Lake Forest, CA 92630

Repairs

Your Mac Broke Down? Need Repair/Upgrade?



Call
(800) 622-7977
(408) 747-1555
Fax: (408) 747-1110

We will BEAT any competitive price

Motherboard repair as low as	$75.00
Power supply repair as low as	$45.00
800K/1.4M Floppy drives	$65/$85
Powerbook repair specialist	CALL!!
LaserWriter	CALL!!

24 HOUR SERVICE TURNAROUND
LONGER WARRANTY/FREE DIAGNOSTIC

DT&T Macintosh Service
586 Weddell Dr., Suite 1, Sunnyvale, CA 94089

trotech

Services

Computer Consulting Database, spreadsheet and word processor programming network, hardware and software sales, upgrades and installation. Pacific Data Management

Services

ON-SITE REPAIR

IBM & COMPATIBLES COMPAQ AST
WANG SYSTEMS LASER PRINTERS
FAX MACHINES TERMINALS
INSTALLATIONS SETUPS UPGRADES
HARDWARE / SOFTWARE / NETWORKING

FLAT RATE-NO HIDDEN COST

FOR PROMPT SERVICE CALL !

310-404-3992
213-487-1472
COMPUTER CENTER
NORWALK, CA 90650

CUSTOM PROGRAMMING

- FoxPro 2.x
- dBase
- Clipper
- C
- Windows
- Novell
- SBT Accounting
- Manufacturing
- Point of Sale

OR ANY SPECIAL APPLICATION

Call Dilip

MicroSoft™ SOLUTION PROVIDER

FoxPro Specialist

714-994-3304

FoxPro Paradox — Great Rates! Call DataVision 714•268•6054

Services (310)821-2055

Digital Dilemma? Call HACKER FOR HIRE!—PC/MAC-14 years experience. Setup-Tutor-Repair (310)822-4261

Repairs

Repairs

Repairs

Monitor Repair Specialist

Expert Service on All Makers & Models

$50 Flat Rate

Any PC VGA,SVGA Monitor up to 14"

Monitor for PC, Mac, Workstation.

Power Supply for PC, MAC.

CD-ROM Any Format

Compu Monitek Services, Inc.

10 % off with AD. Expires May 31

10 % off with AD. Expires May 31

3582 Arden Road, Hayward, CA 94545 Tel: (510)264-1682 Fax: (510)264-1684

Services

P.C. Service Authorized Service Center for most brands including Novell and Lantastic networks. Excellent reliable service. (818)887-0040

Automate Your Business with Paradox/Windows. Manufacturing and Accounting. Peter (714)826-1839

HANDS-ON NOVELL NETWORKS

CNE Training Sessions		Advanced Courses	
7 Day Quick-CNE Program	$995	TCP/IP	$425
12 Day CNE Program (3.1x Track)	$1995	4.01 System	$425
		Updating 3.x to 4.01	$395
PRO Package (Includes 5 User 3.12 s/w)	$2495		
ECNE Program	$1995		

Limited time offer. Learn from professionals. Books & disks included. Day, evening and weekend sessions. Call for schedule & details.

Hi Tek Solutions
Computer Education Centers
(714) 474-8270

Hardware Wanted

Wanted: Mac IIci, IIfx or IIsi. Will pay cash. Call (714)662-3369

Apple II/IBM/Mac computers: Please help our public elementary school. Tax donation. Jeff (714)978-8849

Miscellaneous

(714)997-2192

Non-profit agency needs computers, software, printers, facsimile for ElderChek/LatchKey Kid program. (909)887-5608

PLI 40MB & 2 removeable disks $275. (805)529-5451

Miscellaneous

Cordless phone with answering machine built in $79.50. Cordless phone with S/J phone $65

Repairs

Doctor Laser Lasers, Monitors, Laptops, Dot Matrix, Printers, Onsite Repair Specialists. Guaranteed lowest rates. (714)967-0230

Monitor Repair/UPS We specialize in Monitor Repair. Any Brand or Model. We Buy and Sell Used Monitors. Computer Upgrades and Printer repair. DATA NETWORK 1-800-FIX-VGA'S Canoga Park, CA

Monitor /Terminal Repair Depot. $50 flat rates (parts and Labor) excludes flyback &CRT. Guarantee 90 days. (714)554-9768 (310)863-6621 First Elec-

UniTek Co.
Hard Disc Services
Specializing in repair of PRIAM
CONNER, MAXTOR, SEAGATE Hard Drives
From 85¢ per MB
(408) 263-9994

GET HOOKED ON INTERNET E-MAIL!!

UNIX/DOS UUCP $15/MONTH NO START UP OR USAGE FEES!

◆ DPC SYSTEMS MONROVIA, CA. 91016

E-Mail sales @dpcsys.com PH. 818-305-5733 FAX 818 305-5735

Don't Delay, Do it Today!!!

DUPLICATION

IBM OS/2 • MACINTOSH • APPLE
COMMODORE • UNIX
CD ROM

24 Hour Turnaround.
Fastest in the West,
No Minimums!!! Custom Printed
Tyvek Sleeves & Labels
Optical Text Scanning

I.D. DISK CO. 818-882-6454

NATIONWIDE 1-800-882-6454

Computer Consulting sourcing, upgrading, communications, data backup, maintenance and training. Network/stand alone, hardware/software. U.S. patent holding staff. Com PH (714)643-5330

Macintosh Training. Effective, personal. QuarkXpress, Photoshop, PageMaker, Freehand, Illustrator, Word, Excel, ClarisWorks. Orchid Graphics (800)899-9818

MULTI MEDIA DEVELOPMENT For Product Demos, Interactive Catalogs, Kiosk Systems and Training. Computer Support Services (310)495-8462

Classifieds

Services

Services

Services

Services

Services

Services

SALE · UPGRADE
REPAIR · DATA RECOVERY

DATA RECOVERY

CAPACITY	MFM/IDE/RLL ESDI/SCSI	CAPACITY	MFM/IDE/RLL ESDI/SCSI
10 - 19MB	$180	86 - 119MB	$430
20 - 29MB	$230	120 - 160MB	$480
30 - 39MB	$280	161 - 230MB	$530
40 - 49MB	$330	231 - 330MB	$580
50 - 85MB	$380	331 - 430MB	$630
		431 - 700MB	$680

* Data recovery includes repair of the drive.
* No charge if we are unable to recover data.

HARD DRIVE REPAIR PRICE

CAPACITY	MFM/ IDE/RLL	ESDI/ SCSI	CAPCITY	MFM/ IDE/RLL	ESDI/ SCSI
10-19MB	$40	$45	86-119MB	$100	$105
20-29MB	$45	$50	120-160MB	$110	$115
30-39MB	$55	$60	161-230MB	$130	$135
40-49MB	$65	$70	231-330MB	$160	$160
50-85MB	$90	$95	331-430MB	$200	$205
			431-700MB	$230	$235

MONITOR REPAIR PRICE (12" & 14")

MONITOR	QUANTITY 1	2-5	6-10	11+
Any Mono	$39	37	35	33
Any CGA	$55	53	51	49
Any EGA	$59	57	55	53
Any VGA	$69	67	65	63
Any Super VGA	$75	73	71	69
Any Multisync	$89	87	85	83
Any Mono Terminal	$65	63	61	69
Any Color Terminal	$89	87	85	83

CRT AND FLYBACKS EXCLUDED
*FREE Pick-up & Delivery in O.C. if More Than Five Monitors

SYSTEM UPGRADE

XT to 386SX/33MHz w/1MB $129
XT to 486SLC/33MHz w/1MB $149
XT or 286 to 386DX/40MHz w/1MB $159
286 or 386 to 486DX-33/66MHz w/1MB ..... $409/$579

UPGRADE SPECIAL XT TO 486SLC/66MHz w/1MB + MATH COPROCESSOR ONLY..... $289

FREE LABOR!

SYSTEM REPAIR	FLOPPY DRIVE REPAIR PRICE
We Will Solve Any Problem On Your System! $30 + Parts	5.25" (360K & 1.2MB).....$20 3.5" (720K & 1.4MB).....$25 3.5" PS/2 (720K & 1.4MB).....$35

SPECIAL SALE OF THE MONTH
HARD DRIVE

CONNER/SEAGATE/WESTERN DIGITAL/MAXTOR

260MB	IDE	NEW	$215
340MB	IDE	NEW	$269
425MB	IDE	NEW	$289

* 1 Year Warranty On New Hard Drive

Seagate	20MB	MFM	REF.	$49
Seagate	40MB	MFM	REF.	$95
Seagate	30MB	RLL	REF.	$55
Tandon	40MB	RLL	REF.	$65
Miniscribe	20MB	SCSI	REF.	$55

* 6 Months Warranty On Refurbished Drive.

WE BUY & TRADE-IN WORKING OR NON-WORKING HARDDRIVES

FLOPPY			CONTROLLER	
1.2MB TEAC	NEW	$46	MFM(AT or XT)	$39
1.44MB TEAC	NEW	$41	RLL(AT or XT)	$39
(1.2, 1.4MB NEC)	NEW	$46;$41	IDE w/1/O	$14

PRO COMPUTER COMPANY

12761 Western Ave., Suite B
Garden Grove, CA 92641
Tel.: (714) 891-8293
Fax: (714) 891-3269
Business Hours:
9:00am to 6:00pm Mon. thru Fri.
Sat. 10:00am to 4:00pm

Prices subject to change w/out notice

ENCORE tech
Business Computing & Network Services
NOVELL

(ECNE & CNE on board to serve you)
- ✦ Novell Network Services & Support
- ✦ On-site repair & Maintenance
- ✦ Software Design & Programming
- ✦ SBT Accounting Services & Support
- ✦ System Integration
- ✦ Multimedia Hardware & Software
- ✦ ATI Mach32 Ultra Pro VLB 2MB

Tel: (909) 468-0060
Fax: (909) 468-0077

ALL MEDIA DUPLICATION

Diskette • Tape • Cartridge • CD ROM
SCSI Hard Drives • Optical
Exabyte (8mm) • Floptical
D.A.T. (4mm)

Labeling, Packaging and Fulfillment

also CONVERSIONS

Will BEAT any Competitor's Pricing!

ADC APPLIED DATA COMMUNICATIONS
Contact Dave Besse: (714)453-4660

SOFTWARE DUPLICATION
Serving all of Southern California & the U.S.A. since 1980!

•Competitive Prices	YES	•Verifiability	YES
•5 1/4" & 3 1/2" Format	YES	•Quality	YES
•Fast Turn Around	YES	•Service	YES
•Packaging	YES	•Name Brand Media	YES

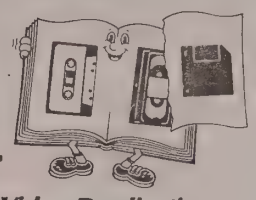
FSI FUTURE SOLUTIONS, INC.
17921EF SkyPark Circle
Irvine, CA 92714
1-800-FUTURE-5
(714) 250-1133

CATALINA TECHNOLOGY
FULL SERVICE COMPUTER SALES, SERVICE & REPAIR
ALL COMPATIBLES!
SPECIALIZING IN HARD DISK REPAIR
• 2 to 5 Day Turnaround • Full Warranty On Repair
WE SELL NEW & RECONDITIONED PRODUCTS!
(714) 434-9144
3422 L West MacArthur Blvd.
Santa Ana, CA 92704

NEED A NERD? Consulting for Networks, Windows, DOS, Database, Accounting, Desktop Publishing, Communications, Private Instruction, Repairs, Upgrades, Sales. Home or Office. (714)453-9631 SPECTRUM NETWORKS 10 Yrs. Experience. CNE

Need Help? Then Call IBM & Mac Experts. Training, Data Recovery, Virus Removal, Troubleshooting, Sales & much more. Home or Office. Satisfaction Guaranteed. NCC (818)385-0917

WHEN SELECTING A DUPLICATOR TAKE A PAGE FROM OUR BOOK...



Diskette, Audio & Video Duplication
Complete assembly and packaging services available with duplication.
Proudly serving the Training, Educational and Publishing industries since 1971
TAPETTE CORPORATION
15702 Producer Lane • Huntington Beach, CA 92649
Phones (714) 638-7960 • (310) 594-4454 • FAX (714) 891-0638
Member ITVA

COMP-U-TECH
OUR PC PROFESSIONALS
will help you trouble shoot PC problems & install new hardware & software. Optimize your computer system. Programming assistance.
1-900-225-TECH
9AM-9PM Pacific Mon-Sat
First minute $3, then $2/min.
COMPUTECH 702-593-0303
Clip and tape to your computer

Network Training Novell System manager and CNA review. Also applications (WP/123) training. Phone Jeff (714)772-2517

NOVELL NETWORKS Certified Netware Engineer available for installations, upgrades & trouble shooting. Voice mail (714)571-8465

ONSITE COMPUTER SEVICE Repairs, Upgrades, Consulting, Networking, Database & C Programming, Windows, DOS, PARADOX, File Maker Pro & More. Call Edward & Darren 7 days (714)963-1407 & (714)774-6092

PC & Network, hardware & software specialists. We can solve your computing blues at your office/home or our office. Knowledge in DOS, Windows, Novell, OS/2, etc. (818)304-1165

PC repair $35 + tax. Monitor repair $65. Upgrades $45 + tax. VL Bus new PC from $999. Bamboo Express (818)882-0220 9849 Topanga Cyn. Bl., Chatsworth, CA 91311. Some limitations may apply.

Save Money. Learn 10 time faster with Professor 3T tutorials: DOS, Windows, WordPerfect, Programing...47 subjects. No manuals needed. Software Academy (619)464-2500. Reps & Licensing inquiries welcome.

Setup, Upgrades, Repair, Sales, etc. MS-DOS and Windows support. 15 years experience. Call Rivan (714)495-7807

The Computer Tutors will help you learn any program at your home or office. Flexible hours & reasonable rates. Experienced, patient professionals. Don Roark (310) 821-6184

CUSTOM PROGRAMMING. FoxPro, dBase, Clipper. Network and single user, multi site data collection. Specialized programming needs for your business. Call Ed (714) 363-7573 for your 1 hr. free consultation

Software

Adult CD-ROMS 420. Box 119, 137 S. Vermont, L.A., CA 90004

Software

DISCOPYLABS
The Complete Software Production Company
SOFTWARE MANUFACTURING OF CD-ROM, ALL DISKETTES, VIDEO, TAPES & DATA CARTRIDGES WITH COMPLETE ASSEMBLY, PACKAGING AND FULFILLMENT CAPACITY.
DISCOPYLABS 1-800-726-4470

USER GROUPS continued...

Continued from page 156

Burbank Board of Realtors Bldg., 2006 W. Magnolia, Burbank. BBS, PD library, SIGs, newsletter. All welcome. Fee, $4. Call: Estella McClintock, (818)848-1948; or Grayce Hruda, (818)842-3707. [Exp. #127.]

KAYPRO

KAYOS Kaypro User Group. Meetings: 4th Mon. of even months, 6:00 pm, El Segundo Library. Call: (310)379-8339. [Exp. #124.]

MACINTOSH

Champions Of The Mac Proletariat (CHOMP). Meetings: 4th Thurs., 7:30 pm, Cal Poly Pomona, grey building near administration building, rm. P2-7. Call: Craig Richards (909)985-7385 or Mitch Cohen, (909)598-5766. [Exp. #123.]

South Bay Apple Macintosh User Group. Meetings: Last Wed., 8:00 pm, El Camino College, MCSC Rm. 100, 16007 Crenshaw Blvd., Torrance. Call: (310)644-3315. [Exp. #127.]

West Orange County Macintosh User Group (WOCMUG). Meetings: last Tues., 7:00 pm, Emerson Elementary School, 2625 Josie, Long Beach (NE corner of Palo Verde and Willow). Come and join with other Mac users to share knowledge and experiences. Call: Lynn Goodrich, (714)892-8910; or Tony Muller (310)493-1240. [Exp. #127.]

PROGRAMMING

Software Toolsmiths. Meetings: Last Sat., 10:00 am, Joslyn Center, 339 Sheldon St., El Segundo, CA. Discussion and tutorials on programming, including C++, Forth, J, Smalltalk, algorithms, operating systems, and hardware. Neophytes welcome. Call: John LuValle, (818)797-1820; or Howard Rogers, (310)532-3342. [Exp. #124.]

ASSOCIATIONS

American Society For Information Science, Los Angeles Chapter. For information professionals concerned with a variety of topics: library automation, the information superhighway, etc. Call: Carolyn Loeffler, (310)825-4019. [Exp. #127.]

Independent Computer Consultants Association, Los Angeles Chapter. Meetings: 1st Thurs., 6:00 pm. Prepaid reservation, $25, or at the door, $35. The LA chapter provides referral services. Call: (213)872-1811. [Exp. #127.]

Software Council Of Southern California. A nonprofit trade association whose membership is comprised of software development organizations, as well as companies providing support and services to the local software industry. Call: Arlene Munson, (310)328-0043. [Exp. #127.]

Southern California Computer Society. Meetings: 4th Tues., 7:00 pm, Farmers & Merchants Bank, 12535 Seal Beach Blvd., Rossmoor, on southern side of Rossmoor shopping area. Call: Hank Burwash, (310)596-9670. We welcome all who are interested in computers. BBS and monthly newsletter. $15 dues per year. [Exp. #124.]

•••NOTICE•••
ACP's 61st GIANT
COMPUTER SWAP MEET
Sunday
May 22nd, 8–2
Orange County's Original!
FREE Admission and Parking
100's of Sellers 'n Deals
in the Huge Parking Lot
Advanced Computer Products, Inc.
ACP SUPER STORE
Since 1976
1310 E. Edinger
Santa Ana • 714-558-8813
Some Dealer Space Still Available...Call Mary

Classifieds

Software

ALL LANGUAGES fonts, translators, dictionaries, word processors, spell checkers, tutorials, OCR translators & more! Use any language font in all your English window applications, $69! Best prices, best source. TransLanguage, Inc. (800)308-8883

Big opportunity to make money, automate your clients' business. Buy the rights to our vertical market applications and sell them under your name. Manufacturing, Distribution, Accounting – System, Church Management, Medical and Dental Billing. Integrated Solutions (818)843-5126

Borland Office 2.0. New, unopened Quattro Pro, WordPerfect 6.0, Paradox. $300 (714)636-1644 after 10pm

DIRECT MAIL ORDER Hires scenic color photos for MS Windows, $12.95. Call 24 Hrs for info and ordering. (310)926-5534

Software

MANUFACTURING SOFTWARE:
Are you sitting on the fence? Knowing you have to TIME your inventory usage. We sell and support fully integrated MRP-Accounting Software. (702)885-9125

Memorize•It for Mac or Windows. Electronic/printed flashcards using pictures, drawings, text and sound. $49 Free catalog. (714)952-4114; FAX(714)995-6725

SoftwareWanted

We buy software. All types, any quantities. Cash paid. (714)219-0539

Tech Writing

Timing diagrams and line drawings for technical publications drawn in FrameMaker $30/hour. (415)728-9188

Career Marketplace

Jobs Offered

Jobs Offered

HIRING
MERCHANDISING ACCOUNT REP
30-35K+EXPENSES
Join this million dollar corp w/35% travel to major computer stores thruout US. 2 yrs outside sales exp. plus computer product knowledge req. Excellent benefits! Interviewing Now!
THE FOCUS AGENCY
818-981-9519

It only happens once a decade.

10
MicroTimes
Ten Year
Celebration

Coming in **May 1994** watch for an exciting new look wrapped around the same **great editorial** you've found in ***MicroTimes*** **month after month** since 1984.

Join us for a look back on the last ten years in the **computer industry** and a peek at what industry visionaries see coming up in the **next ten**.

PC SYSTEMS DESIGN CORP.

Computer Prices Better Than Superstores

APPLE POWER MACINTOSH COMPUTERS ARRIVED

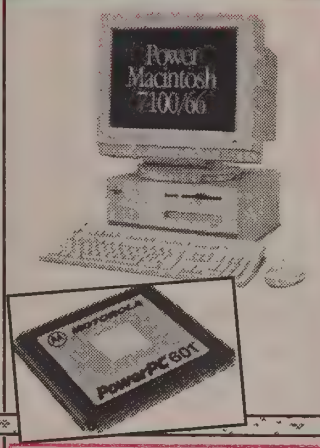
SAVE !

Apple® Power Macintosh™ 6100/60Mhz 8/230/CD

$1897*

- .Power PC™ 601 RISC Processor , 60 Mhz
- . 8 MB RAM, Expandable to 72
- . Built In Video
- . Most Affordable Power Macintosh Computer

*with purchase of ClarisWorks at $199 and Oddesso Ext KB at $149



Apple® Power Macintosh™ 7100/66 Mhz 8/250

$2468*

- . Power PC 601 RISC Processor,66 Mhz
- . 8 MB RAM expandable to 136
- .Three Nu Bus™ Slots
- .Ideal for Business

*with purchase of ClarisWorks at $199 and Oddesso Ext KB at $149

Apple® Power Macintosh™ 8100/80 Mhz 8/250

$3799*

*with purchase of ClarisWorks at $199 and Oddesso Ext. Kb at $149

- . 601 RISC CPU, 80 Mhz
- .8 MB RAM, Expandable
- .Unsurpassed Power
- .Ideal for 3D Modeling

Apple® Macintosh Quadra®610 8/230/CD

$1883*

*with purchase of ClarisWorks at $199 and Oddesso Ext. Kb at $149

- . 68040 CPU, 25Mhz
- .8 MB RAM
- . 68882 Math Co-Processor
- .CD 300 Plus

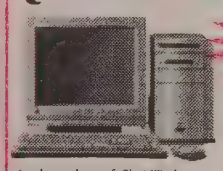
Apple®Macintosh Quadra®650 8/230/CD

$1878*

*with purchase of ClarisWorks at $199 and Oddesso Ext. Kb at $149

- . 68040 CPU, 33 Mhz
- . 8 MB RAM
- . Expandable
- . High performance

Apple®Macintosh Quadra® 840av 8/230

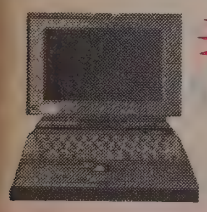


$2778*

*with purchase of ClarisWorks at $199 and Oddesso Ext. Kb at $149

- .68040 CPU, 33 Mhz
- .8 MB RAM
- .Expandable
- .Ideal for business

Apple®Macintosh® PowerBook®145B 4/80

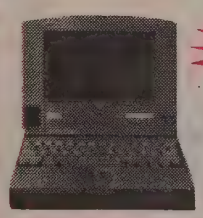


$1186*

- . 68030 CPU, 25 Mhz
- . 4 MB RAM
- . 9.5" LCD Display
- . Affordable

* with purchase of ClarisWorks at $199

Apple®Macintosh® PowerBook Duo™ 270c 4/240

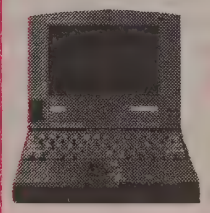


$2498*

- . 68030 CPU, 33 Mhz
- . Active Matrix LCD
- . Light
- .Optional Int. fax MDM

* with purchase of ClarisWorks at $199

Apple®Macintosh® PowerBook Duo™ 250 4 MB /200

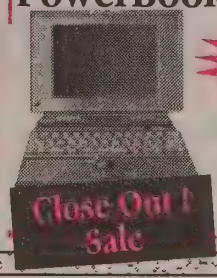


$2086*

- . 68030 CPU, 33 Mhz
- . 4 MB RAM
- . Active Matrix LCD
- . Small & Light

* with purchase of ClarisWorks at $199

Apple®Macintosh® PowerBook®165c4/80

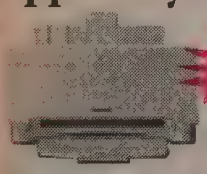


Close Out ! Sale

$1648

- . 68030 CPU, 33 Mhz
- . 4 MB RAM
- . Color LCD Display
- . 68882 Math Chip

Apple® StyleWriter® II

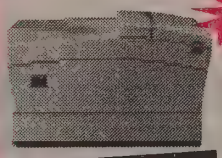


$269

360 DPI

- . 360 Dpi Quality
- . 39 Scalable
- ---TrueType™ Fonts
- .100 Sheet paper Tray

Apple® LaserWriter Select™ 360

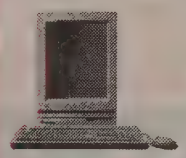


$1449

PostScript II

- . 600 Dpi Quality
- . 10 PPM
- . 7 MB RAM
- . 64 Scalable TrueType™ Fonts

Apple Macintosh LC III 4MB/40HD



$599

Close Out ! Sale

68030 CPU, 33 Mhz

. Built In Video

Apple Macintosh Quadra 660av 8/80

$1183

Close Out ! Sale

- . 68040 CPU, 25Mhz
- 8 MB RAM
- 68882 Math Co-Processor
- .CD 300 Plus

Apple, the Apple logo, Mac, Macintosh, Macintosh Quadra, PowerBook, and StyleWriter are registered trademarks of Apple Computer Inc.. TrueType, LaserWriter Select, Power Macintosh, and PowerBook Duo are trademarks of Apple Computer Inc . Newton, the Newton Logo, and Newton MessagePad are trademarks of Apple Computer Inc.. ClarisWorks is a trademark of Claris corporation. Power PC is a trademark of International business Machine. Nu Bus is a trademark of Texas Instrument . Prices are good for stocks on hand and reflect cash discounts . PC Systems is not responsible for any typographical error. See your sales rep for more details .. CPU prices shown do not include keyboard or moniotr unless mentioned .

1 MB SIMMS	$49
2 MB SIMMS	$89
4 MB SIMMS	$169
8 MB SIMMS	$329
16 MB SIMMS	$659

Brea
2860 E. Imperial Hwy
(714) 996-0690

Pasadena
240 S.Lake
(818)792-1391

Torrance
22533 Hawthorne Blvd
(310)373-0832

Authorized Dealer

ADVERTISER BY CITY INDEX

For your convenience, here is a list of advertisers by county and city. Please see the advertiser index on page196 for the page number of the advertisement.

LOS ANGELES COUNTY

Brea/Diamond Bar
USM

Cerritos
Micro City

City of Industry
Advanced Pro Technology
CitiCom Computers, Inc.
Comtrade
Kingsley Computer, Inc.
PC Club
PC Warehouse
Royal Electronics, Inc.
USA Systems

Claremont/Pomona
Domino Computer
Computer Market Place

Gardena
Gatetronix Control Systems
Kamfoz
PC Warehouse

Hawthorne/Lawndale
ATC Computer
ATS, Inc.
Creative Computers

Los Alamitos
Mars Computers

Los Angeles
3-6 Computers
ATC
Adcon Computer Systems
CompuTopia
CompuTek
Cygma Computer
Dav Tech
Einstein Computer
EZ Computer
Input Automation
Image Microsystems
Portcom, Inc.
Uptown Computer

Pasadena
Advanced Computer Center
Domino Computer
Mt. Sierra College
Pasadena Computer Center
PC Systems Design
The California Computer

San Fernando Valley
Alcom
Americal
Annex Communications
ASC Computer
ATC Computer
Certified Network Educators
Cmos Solutions
Compu Help
CompuNet Solutions
Computerlane, Inc.
Domino Computer
Electronic Music Box
Goodman Music
Hacker Electronics
Mac Universe
Mars Computer
Micro City
PC Service
PC Warehouse
Pacifico
R-Tech Computers
Soft Hard System
Trade Tek
Unitek Computer Stores
West Hills LAN

San Gabriel Valley
A-1 Computer
Alpha International
CD Archives
Computer Pacer
Eurone LA
Goodman Music
Kingsley Computer
Micro Discover System
MicroSource
Network Solution Computer
PC Warehouse
Quality Computer
Symphony Computer
TSC Computer Products

Santa Fe Springs
Dynamic Computer Company
Jenlish International
MAI Computer
Melco International
PC Warehouse

Santa Clarita
GCS/All Micro Services

Santa Monica
Advanced Micro System, Inc.
Authorized Service Technology
Computer Business Center
Creative Computer
Micro League
Theta Computer

South Bay
Advanced Computer & Technology
Alltech Electronics
Domino Computer
Fry's
Input Automation
PC Systems Design Corp
PC Warehouse

Walnut
AIC Computer
Asean Computer Technologies
Binomial Systems
Climax
Domino Computer
MIP Systems
9th Generation

West Los Angeles
20/20 Technologies
Carrot Computer
Goodman Music
LA Computer Center
Lea Computer
PC Factory
Pasadena Computer Center
Pacifico Computers
Unicomp Systems
Unitek Computer Stores

ORANGE COUNTY

Anaheim
Instruction Plus
MagicTek Computers
Soft Tech Computers
Yokohama Telecom Corp.
ZyXEL

Buena Park
Advanced Computer & Technology
Computer Business Center
EKM Computer
L.A. Micro
Net Computer

Fountain Valley
Development Systems
Domino Computer
Fry's
The Essence Group
Net America

Fullerton
B&N Computer
EZ Computer

Garden Grove
Citicom Computer, Inc.
CompuTek
CompuTopia
EZ Computer
Pro Computer Company

Huntington Beach/Westminster
Abcom Computer Products
Anthurium Technology Company
Computer Exchange
Computer Liquidation Center
Development Systems
Digital Express Group
Katronic Company
Microsel Peripheral
Peaktron Computer, Inc.

Irvine
Domino
JustTheFax
MPC Compworks, Inc.
PC System Design
The Essence Group
USM

Laguna Hills
Macro Technologies
Portable Computing Tech.

Lake Forest
Creative Computers
Lake Forest Computer Center
Logicache Computers, Inc.

Orange
ATC
RPB Computer Systems

San Juan Capistrano
Micro City

Santa Ana
ACP-Advanced Computer Products, Inc.
Alltech Electronics
Computer Max
Computix
Linnex Computers, Inc.
M-Tek

Stanton
Computer Plaza
Computer Supply Club

Tustin
ACI Computers
MicroShop Computer Products

Yorba Linda
Domino Computer
Future Computing Solutions

SAN BERNARDINO COUNTY

Fontana
Supercom Multi Systems, Inc.

Rancho Cucamonga
Mack Computer

San Bernardino
EZ Computer

SAN DIEGO COUNTY

Altech Electronics
ComputerEdge Magazine
Creative Computers
Jenlish International
Micro City
San Diego Computer Fair
San Diego Computer Society

CMOS SOLUTIONS™ "WE MAKE ROM BIOS ADD UP."©

Your PC + Our New BIOS = Maximum Performance

FEATURES OF A NEW ROM BIOS

1.2, 1.44, 2.88 Floppy support • Unlimited IDE Support • MS DOS 6, OS2, Novell, DR DOS & MS Windows • All Compatible VGA, SVGA • Set Up in ROM, Anti-Virus & Password Option • Faster I/O Speed • Support VESA Local Bus • 4 Floppy Support, Selectable Boot Drive • and More...

Our new BIOS will give you over 100 different configurations!

Upgrade your PHOENIX, AWARD, A.M.I. OR MR. BIOS to our NEW 1994 Revs. Free Chip Puller with Bios Kit.

WHY BUY SOFTWARE TO BOOST YOUR IDE DRIVE WHEN YOU CAN INCREASE IDE PERFORMANCE UP TO 35% WITH OUR NEW ROM BIOS?

• Older and smaller Capacity IDE & MFM drives receive a big performance boost • Dynamic parallel and serial mapping... now you can change ports without changing the jumpers...

1-800-266-7462

TOLL FREE 1 (800) CMOS-INC

VISA MasterCard

26560 Agoura Road • Suite 112 • Calabasas, California 91302 • FAX 818-880-8966 • PHONE 818-880-2136

MICRO LEAGUE DELIVERS A LIFETIME OF QUALITY

90 DAYS FREE FINANCING AVAILABLE

"MICRO LEAGUE, in a league by itself..."

ViewSonic® TOSHIBA Canon EPSON CITIZEN Panasonic COMPAQ HEWLETT PACKARD TEXAS INSTRUMENTS OKIDATA NEC IBM SCO

PENTIUM

Intel PCI Motherboard

w/3PCI Slots & 256K, Heat Sink & Cooling Fan Cache.
Built-in IDE & I/O (2S/1P/1G)
8MB RAM
540MB IDE Hard Drive
Teac 1.2 or 1.44MB Floppy Drive
PCI Graphics Accelerator Card w/1MB
15" SVGA Monitor (1024x768) .28 (Low Radiation) NI
101 Enhanced Keyboard & Mouse
Mid Tower or DeskTop Case w/Power Supply

INTEL 586DX-60MHz.....$2599
INTEL 586DX-66MHz.....$2889

Multimedia Kit
*Double Speed CD ROM
Shielded Speakers
4 CD Titles
Sound Blaster 16 MCD & Microphone
$359
*With NEC Triple Speed CD ROM
$599

VESA Local Bus System

3 VL-Bus Slots
256K Cache, Pentium P24T Ready
Teac 1.2 or 1.44MB Floppy Drive
260 MB IDE Hard Drive
32-Bit V-Local Bus Super IDE & I/O
(2 Serial, 1 Parallel, 1 Game Ports)
32-Bit V-Local Bus SVGA Card w/1MB
14" SVGA Monitor (1024x768) .28 Color
101 Enhanced Keyboard & Mouse
Mid Tower or DeskTop case w/Power Supply

486SX-25.....$999
486DX-33.....$1189
IBM SLC2/66.....$1169
486DX2/66.....$1339

Apple Power price drop

POWER PC

6100/60

Power and speed

- 60-MHz PowerPC 601 microprocessor with floating-point processor and 32K cache Memory
- 8MB of RAM, expandable to 72MB Expansion
- Eight built-in ports to support a wide range of peripherals (6100/60AC has eleven)
- Slot for processor-direct or NuBus expansion card (6100/60 only)
- Optional internal CD-ROM drive
- On-board Ethernet (AAUI)

8MB/160HD.....$1719
8MB/250HD/CD....$2149
AV/8MB 250HD/CD $2449

Authorized Dealer & Service Center

7100/66

Power and speed

- 66-MHz Power PC 601 microprocessor with floating-point processor and 32K cache Memory
- 8MB or 16MB of RAM, expandable to 136MB Expansion
- Nine built-in ports to support a wide range of peripherals (7100/66AV has eleven)
- Three NuBus slots for expansion cards
- Optional internal CD-ROM drive
- On-board Ethernet (AAUI)

8MB/250HD.....$2679
8MB 250HD/CD.....$2989
AV/8MB 500HD/CD.....$3749

TOSHIBA

Authorized Service Dealer

T1910, 486SL/33,4MB, 120/200.....$1495/1745
T1910CS, 486SL/33, 4MB, 120/200.....2129/2329
T1950CS, 486DX2-40, Dual Scan 4MB, 120/200.....2439/2689
T1950CT, 486DX2-40, Active Matrix, 4MB 120/200/320.....CALL/2975
Protege T3400, 486SX/33,4MB, 120.....2189
T4600, 486DX2-50.....IN STOCK

COMPAQ

Authorized Dealer & Service Center

CONTURA 486SL-25C, Color 4MB, 120/200..2149/2399
CONCERTO 486SL-25, Pen-Based 4MB, 120.....1899
LTE LITE 486SL-33C, 4MB 120/200 (Active Color) IN STOCK.....4099/CALL
CONTURA AERO 4/25, 4MB, 84/170.....1289/1598
PROLINEA MT 486DX2-66, 4MB, 245/340/340-CD.....CALL/2199/2499

PROLINEA MT 486/33s

Compaq Tower Case, VESA Local Bus Video, 4MB RAM up to 32MB, 270MB Hard Disk, 1.44MB Floppy Drive, Compaq Mouse, MS DOS 6.0, MS Windows 3.1, 101 Keyboard, 3 Year Warranty
$1395

ALL DESKPRO, PROSIGNIS, PROLIANT MODELS AVAILABLE AT LOWEST PRICES . . . CALL US!
Pagemarq 15 15ppm Laser Printer.....$1499

CONTURA 486SL-25, 4MB, 120/209.....1799/2159

OKIDATA

Authorized Dealer & Service Center

320/321 9PIN.....$309/419
ML380, 24PIN.....215
520/521 9PIN.....375/489
590/591 24PIN.....429/CALL
OL 400E 4PPM, w/Toner.....495
Doc-it 3000, 300dpi, Laser, Fax, Scanner, Copier....2325

OL410e

- Amazing 600dpi class output for sharp text and graphics
- Fast 25sec. time-to-first-page with RISC microprocessor
- 12 built-in scalable fonts for distinctive output
- 5-Year Printhead Warranty
- 2MB Memory **$639**

ActionLaser™1500

EPSON

- Fast 6-ppm print speed
- 27 resident fonts, 13 scalable
- 1MB memory expandable to 5MB
- 300dpi resolution w/RIT
- 2-year limited warranty **$659**

CANON BUBBLE-JET

BJ-10sx.....$255
BJ-200e, 360 dpi.....289
BJ-230, 360dpi.....399

HEWLETT PACKARD

HP Laserjet 4L w/Toner.....$639
HP Laserjet 4ML w/Toner.....975
HP Laserjet 4P w/Toner.....935
HP Laserjet 4MP w/Toner.....1315
HP Laserjet 4 w/Toner.....IN STOCK
HP Laserjet 4M w/Toner.....IN STOCK
HP Laserjet 4SI w/Toner.....IN STOCK
Deskjet/Deskwriter 520 (new).....287
Deskjet/Deskwriter 560C (new).....555
Deskjet500/Deskwriter.....259
Deskjet/Deskwriter 550C.....459
Deskjet/Deskwriter 310 Portable.....299
Deskjet 1200C & 1200CPS.....IN STOCK
HPScanJet IIP w/CTRL.....669
HP ScanJet IICX w/CTRL.....899

Authorized Service Dealer

Authorized Warranty Repair Provider On Site Service, Rental Delivery & Set Up Training, Technical Support Network Specialist.

Corporate Accounts, Dealers, Government and School P.O.'s Welcome

ML MICRO LEAGUE INC.

1844 LINCOLN BLVD. (NORTH OF PICO) SANTA MONICA, CA 90404

310-450-2708
OUT-OF STATE
800-466-2708
FAX (310) 452-1294

*With purchase of selected Apple printer. *Price after Rebate. SINCE 1989 PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE

Apple, the Apple logo, LaserWriter, StyleWriter, Mac & Macintosh are registered trademarks of Apple Computer Inc.

ADVERTISERS INDEX

3-6 COMPUTERS....115
20/20 TECHNOLOGIES....19
A-1 COMPUTERS....134,135
ABCOM COMPUTER PRODUCTS....54
ACI, AMERICAN COMPONENT INT'L....128
ACP SUPERSTORE....63,192
ADCON COMPUTER SYSTEMS....55
ADVANCE PRO TECHNOLOGY....76
ADVANCED COMPUTER & TECHNOLOGY....65
ADVANCED COMPUTER CENTER....52
THE ADVANCED MICRO SYS & SVC....97
AIC COMPUTER....107
ALCOM SYSTEMS....197
ALLTECH ELECTRONICS....119
ALPHA INTERNATIONAL....172
ALTIMA SYSTEMS....26
AMERICAL GROUP....3
ANNEX TELECOMMUNICATIONS....156
ANTHURIUM TECNOLOGY CO....111
ASC COMPUTER....112,113
ASEAN COMPUTER TECHNOLOGIES....174,175
ATC....28,29
ATS....89
AUTHORIZED TECHNICAL SERVICES....185
B & N COMPUTER....89
BASON COMPUTER / TRADE TEK....196
BINOMIAL SYSTEMS....43
CALIFORNIA COMPUTER SYSTEMS....149-151
CARROT COMPUTER....161
CD ARCHIVES....54
CERTIFIED NETWORK EDUCATORS....88
CITICOM COMPUTER, INC....49
CLIMAX ENTERPRISES....96
CMOS....194
COMMAX TECHNOLOGIES....187
COMPU NET SOLUTIONS....95
COMPUTEK....25
COMPUTER BUSINESS CENTER....126,127
COMPUTER EXCHANGE....8
COMPUTER LIQUIDATION CENTER....180
COMPUTER MARKETPLACE....145
COMPUTER MAX....147
COMPUTER PACER....17
COMPUTER PLAZA....78
COMPUTERLANE, INC....94
COMPUTIX....171
COMPUTOPIA, INC....27
COMTRADE....92,93
CORPORATE SYSTEMS CENTER....20
CREATIVE COMPUTERS....7
CRL....95
CYGMA COMPUTER....70
DAV-TECH....4,5
DEVELOPMENT SYSTEMS....131
DIGITAL EXPRESS GROUP....154
DOMINO COMPUTER....2
DYNAMIC COMPUTER COMPANY....34,35
EINSTEIN TECHNOLOGY....120
EKM COMPUTER....177
ELECTRONIC MUSIC BOX....168
THE ESSENCE GROUP....162-166
EURONE LA....159
EVERNET EDUCATION SERVICES....56
EZ COMPUTER....41
FRY'S ELECTRONICS....99-104,199
FUTURE COMPUTING SOLUTIONS....87
GATETRONIX CONTROL SYSTEMS....72
GOODMAN MUSIC....9,62
HACKER ELECTRONICS....10
HAMILTON MULTIMEDIA SYSTEMS....181
IMAGE MICROSYSTEMS....37
INPUT AUTOMATION....178
INSTRUCTION PLUS....66
JENLISH INTERNATIONAL....91
KAMFOZ COMPUTER SYSTEMS....143,158
KATRONIC COMPANY....173
KBBS....153
KINGSLEY COMPUTER....160-161
L.A. COMPUTER CENTER....50
L.A. MICRO....75
LAKE FOREST COMPUTER CENTER....46
LEA COMPUTERS....148
LINNEX COMPUTERS, INC....66
LOGICACHE COMPUTERS, INC....56
LOGITECH....85
M-TEK....114
MAC UNIVERSE....58
MACK COMPUTER....133
MACRO TECHNOLOGIES....30
MAGICTEK COMPUTERS, INC....136,137
MARS COMPUTER....130
MAXIMUS....32
MEDIA VISION....39
MELCO INTERNATIONAL GROUP....74
MICRO AMERICA....57
MICRO DISCOVER SYSTEMS....73
MICRO LEAGUE....195
MICRO SOURCE....106
MICRO SYS AUTOMATION, INC....160
MICRO-CITY/GST, INC....124,125
MICROSHOP COMPUTER PRODUCTS....96
MIP SYSTEM, INC....90
MPC COMPWORKS....136,137
MT. SIERRA COLLEGE....62,170
NET AMERICA....48
NET COMPUTER....140,141
NEW TECHNOLOGIES....69,108,109,157
NINTH GENERATION....118
N.S.C. COMPUTER....112,113
PASADENA COMPUTER CENTER....22,23
PC CLUB....81
PC FACTORY....11
PC SERVICE....67
PC SYSTEMS DESIGN....193
PC WAREHOUSE....10
PEAKTRON COMPUTER, INC....26
PORTABLE COMPUTING TECH....180
PORTCOM, INC....110
PRO COMPUTER SERVICE COMPANY....132
QUALITY COMPUTER....60,61
QUARTERDECK OFFICE SYSTEMS....200
R-TECH COMPUTER SALES & SVC....8
R.G. CANNING ATTRACTIONS....88
ROBERT AUSTIN CORP....68
ROYAL ELECTRONICS....44,45
RPB COMPUTER....155
SAN DIEGO COMPUTER FAIR....158
SOFT TECH....122
SOFT-HARD SYSTEMS....129
SUPERCOM MULTISYSTEMS....179
SYMPHONY COMPUTER....121
THETA COMPUTER....71
TSC COMPUTER....112,113
UNICOMP SYSTEMS....36
UNITEK COMPUTER STORES....13-15
UP SOFTWARE....89
UPTOWN COMPUTER, INC....77
USA SYSTEMS....183
USM DISTRIBUTORS....116,117
WALNUT CREEK CDROM....170
WEST HILLS LAN....139
YOKOHAMA TELECOM....30

TRADE TEK 1•800•238•4453

APRIL SPECIALS! thru MAY 1st!

HARD DRIVE WAREHOUSE

21820 NORDHOFF STREET, UNIT A • CHATSWORTH, CA 91311 • (818) 787-2442 • FAX (818) 727-9064

MAXTOR

CAPACITY	MODEL	SPEED	SIZE	PRICE
IDE				
130MB	7131A	15ms	3.5"	$185
213MB	7213A	15ms	3.5"	$209
245MB	7245A	15ms	3.5"	$239
345MB	7345A	14ms	3.5"	$309
535MB	1540A	8.5ms	3.5"	$475
SCSI				
120MB	7120S	15ms	3.5"	$189
213MB	7213S	15ms	3.5"	$239
245MB	7290SR	15ms	3.5"	$325
340MB	7345SR	15ms	3.5"	$369
535MB	LXT535S	12ms	3.5"	$609
540MB	MXT540S	8ms	3.5"	$609
1.2GB	MXT1240	8ms	3.5"	$1200
1.2GB	P12S	13ms	FH	$1054

SEAGATE

CAPACITY	MODEL	SPEED	SIZE	PRICE
IDE				
40MB	ST351AX	28ms	3.5"	$128
130MB	ST3145	15ms	3.5"	$178
210MB	ST3243	15ms	3.5"	$209
250MB	ST3290A	15ms	3.5"	$239
350MB	ST3390A	15ms	3.5"	$309
525MB	ST3655	14ms	3.5"	$445
SCSI				
240MB	ST3290N	15ms	3.5"	$329
450MB	ST3550N	10ms	3.5"	$409
535MB	ST3600N	10ms	3.5"	$519
670MB	ST4767N	11ms	3.5"	$650
1.2GB	ST31200N	10ms	3.5"	$849
2.1GB	ST42100N	14ms	FH	$1649
2.4GB	ST12550N	8ms	3.5"	$2099

MICROPOLIS

CAPACITY	MODEL	SPEED	SIZE	PRICE
IDE				
560MB	MC2205A	10ms	3.5"	$759
1.2GB	MC2210A	10ms	3.5"	$849
SCSI				
340MB	MC1684	14ms	HH	$599
670MB	MC1624	14ms	HH	$675
1.2GB	MC2210	10ms	3.5"	$849
1.7GB	MC1548	10ms	3.5"	$1279
1.7GB	MC2217	10ms	3.5"	$1150
2.1GB	MC1924	11ms	FH	$1779
3.1GB	MC1936	11ms	FH	$2249
1.0GB	MC4110	8ms LP	3.5"	$899

QUANTUM

CAPACITY	MODEL	SPEED	SIZE	PRICE
IDE				
85MB	ELS85A	17ms	3.5"	$168
170MB	ELS170A	17ms	3.5"	$189
240MB	LPS240A	15ms	3.5"	$259
425MB	PD425A	11ms	3.5"	$550
525MB	LPS525A	10ms	3.5"	$565
SCSI				
240MB	LPS240S	15ms	3.5"	$259
340MB	LPS340S	14ms	3.5"	$379
525MB	LPS525S	10ms	3.5"	$565
1.0GB	1080S	9ms	3.5"	$839
1.8GB	1800S	9ms	3.5"	$1450

CONNER

CAPACITY	MODEL	SPEED	SIZE	PRICE
IDE				
40MB	CP3000	28ms	3.5"	$129
170MB	CP30174E	17ms	3.5"	$189
212MB	CFA210A	12ms	3.5"	$209
420MB	CFA420A	12ms	3.5"	$349
540MB	CFA540A	12ms	3.5"	$475
SCSI				
170MB	CP30170	17ms	3.5"	$239
212MB	CP30200	12ms	3.5"	$309
540MB	CP30540	12ms	3.5"	$569

FUJITSU

CAPACITY	MODEL	SPEED	SIZE	PRICE
IDE				
330MB	M2622T	12ms	3.5"	$490
520MB	M2624T	12ms	3.5"	$685
SCSI				
425MB	M2623SA	11ms	3.5"	$599
520MB	M2624FA	11ms	3.5"	$649
1.2GB	M2694SA	10ms	3.5"	$849
1.2GB	M2266SA	14ms	FH	$1089
2.4GB	M2654SA	12ms	FH	$1648

DEC

CAPACITY	MODEL	SPEED	SIZE	PRICE
SCSI				
2.0GB	5200	12ms	FH	$1350
Special for DEC Drive				

CONTROLLERS

ADAPTEC

1542C AT SCSI, 7HD/2FD....$195
2742 EISA SCSI-2....$375

IDE CONTROLLER

ISA 16BIT W/2S 1P 1G....$20
VESA, 32BIT W/2S 1P 1G....$42

EXTERNAL HD KIT (APPLE & IBM)

HD Kit w/Power Supply....$119
Removable Drive Kit....$75
Universal External Kit (plug into Parallel Port)....$169

FUTURE DOMAIN

OEM 950 Chip....$50
MCS600 PS/2 16BIT....$179
TMC7000 32 bit, EISA Kit....$299
TMC1670 2FD/7HD....$109

*Fast SCSI II 10MB/S 7 Year Warranty!

ALWAYS

IN2000....$175
IN7000....$379

TAPE BACKUPS

CAPACITY	MODEL	SPEED	PRICE
ARCHIVE			
250MB	VIPER	6MB/MIN INT.	$345
525MB	VIPER	6MB/MIN INT.	$549
WANGDAT			
250MB	5150	1/4" TAPE INT.	$399
525MB	5525	1/4" TAPE INT.	$649
4.0GB	3200	DAT INT.	$1150
COLORADO			
120MB	DJ10 JUMBO	120	$119
250MB	DJ20 JUMBO	250	$175

CD ROMS

CAPACITY	MODEL	SPEED	PRICE
TOSHIBA			
3401B	200ms	INTERNAL	$359
3401E	200ms	EXTERNAL	$475
SONY			
33A	330ms	W/CARD	$185
MultiMedia Kit w/16 bit Sound Card & Speaker			$360

- APRIL SPECIALS, GOOD THRU 5/1/94
- GOVERNMENT & CORPORATE PO'S ARE ACCEPTED
- NO SURCHARGE FOR CREDIT CARDS
- SAME DAY SHIPPING ON MOST ORDERS
- RETURNS NEED TO HAVE RMA#'S
- SHIPPING AND HANDLING CHARGES ARE NOT REFUNDABLE

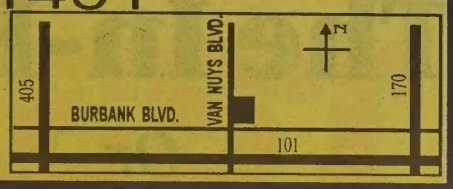
VISA MasterCard

This index is provided as an additional service. Although we do our best to maintain accuracy, the publisher does not assume liability for errors or ommissions.

ALCOM SYSTEMS

5634 Van Nuys Blvd.
Van Nuys, CA 91401

TEL: (818) 989-9182
FAX: (818) 989-2371
Mon - Fri 9-6
Sat 10-5



Novell Netware
LANtastic &
Windows for workgroups
on display
Also, PENTIUM is here!!!

HIGH PERFORMANCE VESA LOCAL BUS SYSTEMS

PENTIUM-60 MHz

* INTEL PENTIUM-60 MHz CPU
* TRUE 64 BIT MEMORY ACCESS
* 512K cache on board
* 8 MB memory (70ns)
* Memory expandable to 64 MB
* 1.2 MB & 1.44 MB floppy drive
* 420 MB IDE hard drive
* 32 bit IDE hard drive controller
* 32 bit VL-BUS S3-805 accelerator w/1 MB
* 14" SVGA monitor, .28 dp, Edge to Edge
* VESA standard, NON-INTERLACED display
* 2 serial, parallel, & game ports
* Enhanced 101 key keyboard
* Full tower case w/2 fans & 250 Watt p.s.
* CPU cooling fan for extra protection
* High resolution mouse

$2249

486DX2-66/DX-50 MHz

* 80486DX2-66/DX-50 MHz with INTEL CPU
* PENTIUM / OVERDRIVE READY
* 256K cache on board
* 3 VESA STANDARD LOCAL BUS slots
* 4 MB memory (70ns)
* Memory expandable to 32 MB
* 1.2 MB & 1.44 MB floppy drive
* 250 MB IDE hard drive
* 32 bit IDE hard drive controller
* 32 bit VL-BUS accelerator card w/ 1 MB
* 14" SVGA monitor, .28 dp, Edge to Edge
* VESA standard, NON-INTERLACED display
* 2 serial, parallel, & game ports
* Enhanced 101 key keyboard
* Medium tower case w/ 230 Watt p.s.
* CPU cooling fan for extra protection
* High resolution mouse

$1399

486DX-33/DX-40 MHz

* 80486DX-33/DX-40 MHz w/INTEL/AMD CPU
* PENTIUM / OVERDRIVE READY
* 256K cache on board
* 3 VESA STANDARD LOCAL BUS slots
* 4 MB memory (70ns)
* Memory expandable to 32 MB
* 1.2 MB & 1.44 MB floppy drive
* 250 MB IDE hard drive
* 32 bit IDE hard drive controller
* 32 bit VL-BUS accelerator card w/ 1 MB
* 14" SVGA monitor, .28 dp, Edge to Edge
* VESA standard, NON-INTERLACED display
* 2 serial, parallel, & game ports
* Enhanced 101 key keyboard
* Mini tower case w/ 230 Watt p.s.
* High resolution mouse

$1229/$1199

486SX-33/SX-25 MHz

* 80486SX-33/25 MHz with INTEL CPU
* PENTIUM / OVERDRIVE READY
* 128K cache on board
* 3 VESA STANDARD LOCAL BUS slots
* 4 MB memory (70ns)
* Memory expandable to 32 MB
* 1.2 MB & 1.44 MB floppy drive
* 170 MB IDE hard drive
* 32 bit IDE hard drive controller
* 32 bit VL-BUS accelerator card w/ 1 MB
* 14" SVGA monitor, .28 dp, Edge to Edge
* VESA standard, NON-INTERLACED display
* 2 serial, parallel, & game ports
* Enhanced 101 key keyboard
* Mini tower case w/ 230 Watt p.s.
* High resolution mouse

$1029/$999

Peripherals

3 Button Serial Mouse	$ 12
Logitech DEXXA Mouse	$ 20
Microsoft New Mouse	$ 40
Trackball Mouse	$ 20
2400 Internal Modem	$ 30
96/24 Internal FAX/Modem	$ 45
14.4/14.4 Internal FAX/Modem	$110
High speed I/O card (2S,P)	$ 40
Optiquest 2000DX 15" Digital Monitor	$399
Optiquest 4000DS 17" Digital Monitor	$699
MAG DX15F 15" Digital Monitor	$475
MAG DX17F 17" Digital Monitor	$799
Diamond Stealth 24 VLB w/1MB	$149
Orchid Fahrenheit 1280 Plus VLB	$149
Orchid Kelvin 64 VLB w/1MB	$185
Conner 250MB tape drive & tape	$170
Colorado 250MB tape drive	$179
Conner 420MB hard drive	$299
Conner 540MB hard drive	$399
80 Watt Power Speaker (pair)	$ 65

386DX-40 MHz

* 80386DX-40 MHz with AMD CPU
* AMI BIOS
* 128K cache on board
* Math co-processor socket
* 4 MB memory (70ns)
* Memory expandable to 32 MB
* 1.2 MB & 1.44 MB floppy drive
* 170 MB IDE hard drive
* 16 bit SVGA card w/ 1 MB memory
* 14" SVGA B/W monitor, 1024 X 768
* 2 serial, parallel, & game ports
* Enhanced 101 key keyboard
* Mini tower case w/ 230 Watt p.s.
* High resolution mouse

$799

MULTIMEDIA UPGRADE KIT

Specifications:

* **ProAudio Spectrum 16 sound board**
  - True 16-bit recording and playback
  - Advanced 20 voice stereo synthesizer
  - MIDI interface and standard joystick port
  - Sound Blaster compatible
  - Built-in high performance SCSI interface
* **NEC Triple-speed CD-ROM Drive**
  - 195ms access speed
  - Data transfer rate: 450KB/sec.
  - 256K cache buffer size
  - Mode-1 550MB/Mode-2 680MB capacity
  - MPC-2 compatible
  - Supports Kodak photo CD format
* **6 CD Software Titles**
  - Multimedia Encyclopedia
  - World Atlas (MPC)
  - U.S. Atlas (MPC)
  - Chessmaster 3000
  - The San Diego Zoo Animals
  - Mavis Beacon Teaching Typing

FREE SPEAKERS

Only $575

QUALITY & SERVICE YOU CAN COUNT ON

All name brand & quality components
All systems are fully tested & burned-in for 72 hours
Free lifetime technical support
Friendly customer service

One year parts & labor warranty

30 Days Money Back Guarantee
20% restocking fee on non-defective parts

On-site Service, Delivery & Setup, Training
Extended Warranty
Available

Prices & specifications subject to change without notice.
Not responsible for typographical errors.

Prices reflect COD cash purchase.
Please add 3% for credit card purchase.

MULTIMEDIA UPGRADE KIT

Specifications:

* **Sound Blaster 16 sound board**
  - True 16 bit stereo playback/recording
  - Software-based audio compression system
  - 20 voice, 4-operator OPL-3 FM synthesizer
  - Output power amplifier with volume control
  - Built-in MIDI interface for music and sound creation
* **PANASONIC Double-Speed CD-ROM Drive**
  - 320ms access speed
  - Data transfer rate: 300KB/sec.
  - 64K cache buffer size
  - MPC-2 compatible
  - Supports Kodak photo CD format
  - Caddyless automatic loading
* **7 CD Software Titles:**
  - Multimedia Encyclopedia
  - World Atlas (MPC)
  - U.S. Atlas (MPC)
  - Chessmaster 3000
  - The San Diego Zoo Animals
  - Mavis Beacon Teaching Typing
  - Return To Zork

FREE SPEAKERS

Only $375

Letting The In-Basket Out

Or

What I Do During The Slow Time Of Year: Read Mail

BY JOHN C. DVORAK

Not a lot is going on in the computer industry. This forces me to dig into my famous in-basket to see what news and letters have arrived. These are things I should be writing about, but who has time? I mean, there is just too much to do online nowadays.

So what's with this University of Washington announcement about a new faster computer system using the new Texas Instruments MVP microchip that lets personal computers be used for video conferencing, movies-on-demand, and interactive games? The thing is called the MediaStation 5000 and it can process a video image in 19 millionths of a second, 20 to 100 times faster than standard 486. AND it makes images five times sharper than the standard television. I combine this information with the wacky Texas Instruments technology called DMD—the digital micromirror device which will replace all projection TV systems by the year 1996 (or so I'm told). These are dinky mirrors on silicon that can make flat-panel wall-sized TV sets a reality. These are weird technologies. I can only conclude that Texas Instruments has captured an alien (obviously an engineer) and exerted force on the alien (or even paid money) to get these designs. Will someone look into this for me?

DVORAK'S LAST COLUMN

Copyright © 1994 by John C. Dvorak. All rights reserved. *John C. Dvorak graduated from the University of California. He is a contributing editor of* PC Magazine *and* MacUser, *and is considered by many to epitomize the contrarian view of things—a charge that he vehemently denies. Dvorak's motto is: If you have nothing nice to say, then don't say anything at all.*

My Favorite Story. According to the online news services, a local computer vandal pulled an amusing stunt on a guy who rented a billboard to express his need for a girlfriend. The vandal got into the guy's phone mail box and made his outgoing message into some X-rated disgusting tome. Does anyone other than me find this hilarious?

Miscellaneous Item Number One. So I see this article that says "IBM Unveiling New Mainframes." I see that the old-timers have managed to retake the company mind-set. It sure must be annoying that a lot of these new mainframes use microprocessors. Of course the margins aren't there any more and Gerstner is saying the company blew it by not going into client-server computing earlier.

Try this Product Dept. I got email concerning a piece I wrote in *PC Magazine.* It comes from Irv Thomae.

*"The paragraphs in your most recent 'Inside Track' headed 'DOS-is-dead-dept.' struck a chord for me. Like Mike Cuthbertson, I've written an application which delivers real value to DOS users—but it's been hard to find willing distribution channels. 'SizeIt' makes new printers' proportional fonts easy to use with (older) text applications that don't support them. LaserJet 4 (and LaserJet-III compatible) printers include a nice assortment of built-in, scalable typefaces, most of which are *proportional*. Almost all word-processor packages support them, so professional-looking correspondence has become commonplace. Most accounting and database applications, however, support only fixed-pitch output. After a couple of attempts to use 'Times' to print reports from apps built with Paradox, dBASE, Clipper, etc., most users resign themselves to Courier.*

"SizeIt combines menu-based setup functions with automatic print-position adjustments, so that the user can select any size of any typeface, and just 'Go.' If a fixed-pitch-only application can 'print to file,' SizeIt will let its users get full value from modern printers, without tedious reformatting. It's a character-mode DOS utility, but it also supports 'drag-and-drop' printing of OS/2 plain text. We've been selling SizeIt direct for $49.95 plus shipping. We get great feedback from our customers, but it's hard to get distribution—apparently because we've solved a problem for which most people have given up hope of finding a simple solution. Irv Thomae Succinct Systems, Inc. (802)-649-5144, (800)-639-3711."

When you talk to software buyers at computer stores nowadays they'll tell you that they seldom consider buying DOS programs anymore.

Internet Humor: This comes from Dennis Ritchie:

Subject: Re: When's Unix's Birthday

>Looks like folks are now beginning to >credit the development of UNIX to >Kernighan and Ritchie, but I thought the >principal investigators were *Thompson* >and Ritchie. Did something change?

The differences between Kernighan Ritchie Thompson are real but very subtle. We all look alike (middle aged with scruffy graying beards). Note these distinctions:

>— Kernighan is slimmest, Ritchie middlest, Thompson heaviest in body build

>— Ritchie got contacts a couple of years ago and so is the only current non-glasses wearer

>— Thompson wouldn't touch netnews with a pole, Kernighan secretly gets misc.invest and misc.taxes mailed to him, Ritchie reads it more than is good for him and occasionally contributes

>— Ritchie is the only one who has met five people who have appeared on David Letterman (Penn, Teller, Rob Pike, Mayor Koch, and the guy who raised the biggest hog in Ohio)

>— Kernighan has written ten times as much readable prose as has Ritchie, Ritchie ten times as much as Thompson. It's tempting to say that the reverse proportions hold for code, but in fact Kernighan and Ritchie are more nearly tied and Thompson wipes us both out.

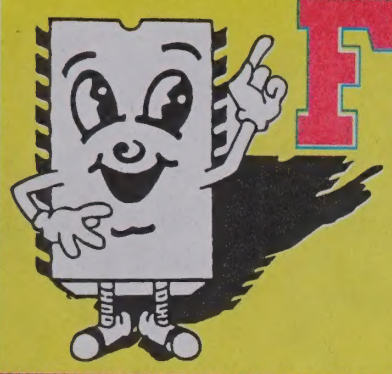
And finally, here's a column that was never written:

Title: What Do They DO, Anyway?

When you visit a software company or a computer maker you invariably make your way through the marketing department. Sometimes there is one person in charge of marketing. Sometimes there are a hundred. You have to wonder what these people actually do all day.

With rare exceptions most of the people working in marketing or advertising within a small computer company are trained on-the-job. I can't tell you how many PR women, for example, tell me that their goal is to become a marketing director at some computer company. Exactly why they think they're qualified was always beyond me until I met some of the marketing people. Then you see that their desires stem from an easily acquired "Hey, *anyone* can do better than that!" attitude.

Luckily there are a lot of studies that are done which provide the critical information...you can tell how well people are doing by comparing what they *should* be doing with what they actually do. ■



FRY'S HAS YOUR BEST BUYS!

CONNER

420MB 3.5" IDE HARD DRIVE

14ms Fast Access • 3.5" X 1"
32K Buffer •IDE Interface
#1886218

$328

486SLC2-66MHz

VESA LOCAL BUS DELUXE DESKTOP SYSTEM

486SLC2-66MHz CPU • Motherboard • 64K Cache
4MB RAM • 3.5" 1.44MB Floppy Drive • 16K Internal Cache
213MB Hard Drive • Windows • DOS
IDE Floppy/Hard Controller • Case • Power Supply • Keyboard
#1866290

$1099

DigispeSoh

Portable Sound Plus

Complete External CD Quality Sound Solution For Laptops or Desktop PC's.

- External 16-bit Sound Card and Speaker Unit
- Stereo or Mono Playback at 16-bits
- 4KHz to 44.1KHz Sampling Rate
- Windows 3.1 Compatible
- Conects to Parallel Port
- Advanced DSP Technology

$159.99

#1800517

2400 BAUD INTERNAL MODEM

- Easy installation and operation
- Hayes compatible command sets • Full or half duplex operation • PC-Bus (IBM compatible)
- Asynchronous operation

#1892712

$16.99

Canon

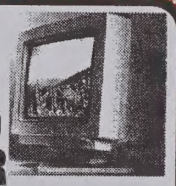
LBP-860 LASER BEAM PRINTER

- 600 dpi • 8 ppm and RISC Processing
- Prints Most PCL5e and PostScript files with Standard 2MB of Memory
- Comes Standard with 100 Sheet Multi-Purpose Tray and 250 Letter-Size Tray

#1879159

$1399

MITAC



1280 x 1024 NON-INTERLACED 15" SUPER VGA MONITOR WITH DIGITAL CONTROL

1280 x 1024 • 15" Large Flat Screen
.28 Dot Pitch • Non-Interlaced • Digital Control
#1855827

$389

STAR WARS CHESS

Star Wars Chess is a brilliant 3D Chess game that puts you in command of Rebel Aliance or the evil Galactic Empire. Use Chewbacca's skill with the crossbow to take out a sinister stormtrooper. You will be part of your own Star Wars movie as you guide each piece to its destiny and watch as they use their skill to surprise you and their opponents with captivating animations.

THE SOFTWARE TOOLWORKS

$39.95

DOS
#1838178

AT&T

ANSWERING MACHINE WITH BEEPERLESS REMOTE

From the Number One maker of telephone products comes this answering machine. It has beeperless remote control, voice activation, ring select and much more!

$34.99

MODEL 1309
#1838754

SONY.

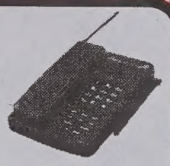
10 CHANNEL CORDLESS PHONE

If you're looking for the best value, look no further than this 10 channel cordless phone from Sony. Utilizing an auto code security system with 300 combinations, out of range alert, base-to-handset paging, 10 number memory and last number redial. Now at only...

$68.95

MODEL SPP-75
#1904752

DIGITAL 900MHz DUAL KEYPAD SPEAKERPHONE



From VTech a leader in 900MHz cordless phone technology come this feature packed unit with 20 channel selection, a digital voice encryption system, out-of-range indicator, four programmable ringer types, one-way page, 10 number memory, mute, flash, hold, and last number redial all for the incredible price of only....

$229

MODEL 900DX
#1852972

MOTOROLA

CELLULAR FLIP PHONE

This premium value cellular phone from Motorola comes equipped with 30 number memory, LED display, call timer, signal strength meter, a battery with 75 minute total talk time, and an overnight charger for only...

LA CELLULAR. Twice the calling area... And fast with digital!

*After $25 Instant Activation Rebate. Price w/o Activation is $254.95.

$229.95*

MODEL DPC-550**
#1635999

**Service Activation not Required. Limit One per Customer. No Sales to Dealers or Resellers.

Home of Fast, Friendly, Courteous Service

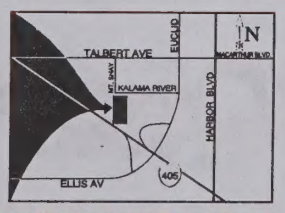
FRY'S ELECTRONICS

Prices good through May 10 , 1994

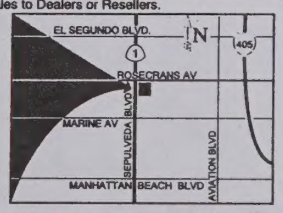
Limit Rights Reserved
Not Responsible For Typographical Errors

STORE HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD



FOUNTAIN VALLEY
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



MANHATTAN BEACH
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

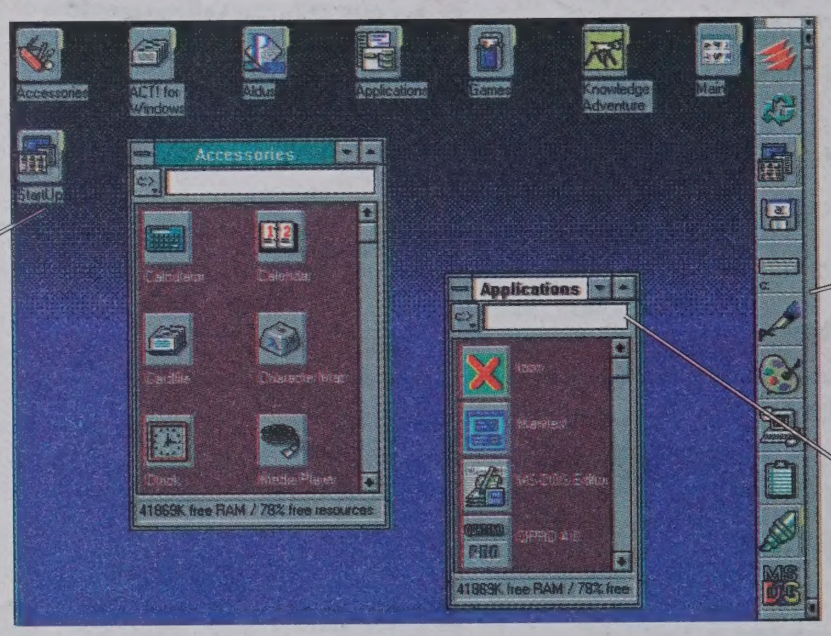
WONK

SideBar Wonks Your Windows to Perfection

SideBar eliminates the last bit of DOS clunkiness from MS Windows.

Object-oriented interface makes it easier to manage files, disk drives and printers.

Simply drag and drop files to copy, move or print them.



Now opening, copying, moving, deleting, renaming and printing are intuitive.

Speed up the way you work by customizing SideBar to conserve desktop space.

Sometimes prefer to key-in DOS commands? The command line's always there.

SideBar is the efficient desktop for Windows—a small, fast shell that automatically creates objects that make it simpler to manage applications, documents, folders, drives, TSRs, printers, etc. All you need to do is point and click.

SideBar simply makes Windows more 'windows-like.' And that makes your work go quicker and easier. It's an idea incorporated in Microsoft Office, but we've taken it to its obvious conclusion.

SideBar makes MS Windows a better place to work.

Quarterdeck

Computer Business Center
Santa Monica (310) 452-2027

Software Supermarket
Los Angeles (310) 477-5122

Computer City
Torrance (310) 791-6400
Brea (714) 257-2400
Cerritos (310) 467-5500

Comp USA
Redondo Beach (310) 793-9955
Fountain Valley (714) 965-1169
Culver City (310) 572-7100
City of Industry (818) 913-3360
San Bernardino (909) 387-1500
Woodland Hills (818) 226-1400

Software Etc.
Northridge (818) 993-9167
Los Angeles (213) 627-5020

Fry's Electronics
Manhattan Beach (310) 364-3797

Egghead
Los Angeles (310) 477-1577
Marina Del Rey (310) 823-2727
Pasadena (818) 793-2085
Santa Monica (310) 829-795`5

©1994 Quarterdeck Office Systems. Trademarks are property of their respective owners.